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THE BENJAMIN STICKNEY CABLE MEMORIAL HOSPITAL, IPSWICH, MASS.

A Small But Complete Hospital Built as a Memorial, in Which the Memorial Feature Does Not Crowd Out the Essential Hospital Requirements—Unique Combination of Natural and Artificial Lighting in Operating Room

BY EDWARD F. STEVENS, ARCHITECT, BOSTON

THE expression of sincere regard for the memory of a friend can be shown no more fittingly than by the creation of a home or hospital or by a fund for the relief and comfort of the unfortunate.

At the moment of the occurrence of the fatal accident which deprived the world of Mr. Benjamin Stickney Cable and saddened the lives of his relatives and friends, the hospital committee at Ipswich, Mass., were endeavoring to secure pledges and money for the erection of a modest hospital to meet the demands of this small but

growing manufacturing town. The fatal accident changed the entire program of this hospital, for a life-long friend and classmate of Mr. Cable came forward and asked the privilege of erecting and equipping the hospital and making it a fitting memorial to his friend.

A suitable site was selected and a careful study begun to make this hospital, first, an ideal small hospital and, second, a fitting and dignified memorial. The site selected was an open lot of about ten acres, with gentle slope toward the north and



Fig. 1. Front view of Benjamin Stickney Cable Memorial Hospital, showing ambulance entrance and method of architectural treatment of operating window.



Fig. 2. South front, with airing balconies and patients' terrace.

south from the center of the lot. To build approaches, plant trees, and create gardens was the

Notwithstanding the fact that the hospital is small (only twenty beds), every department of the larger hospital is provided. On the ground floor, kitchen and dining-room accommodations are secured, as well as a complete x-ray, laboratory, and dental clinic. The autopsy and pharmacy, electric automatic elevator, and vacuum cleaner are also on this floor.

On the first floor, in addition to the wards above noted, a well-equipped operating room has proven interesting, with a gray "sand" tile for the floor, dark buff Grueby tile for the lower six feet of the walls, surmounted by a darker brown border, and upper walls and ceiling of a light buff. The lighting is not only all that is required but is of such a tone as to prevent eye-strain. The usual sky-

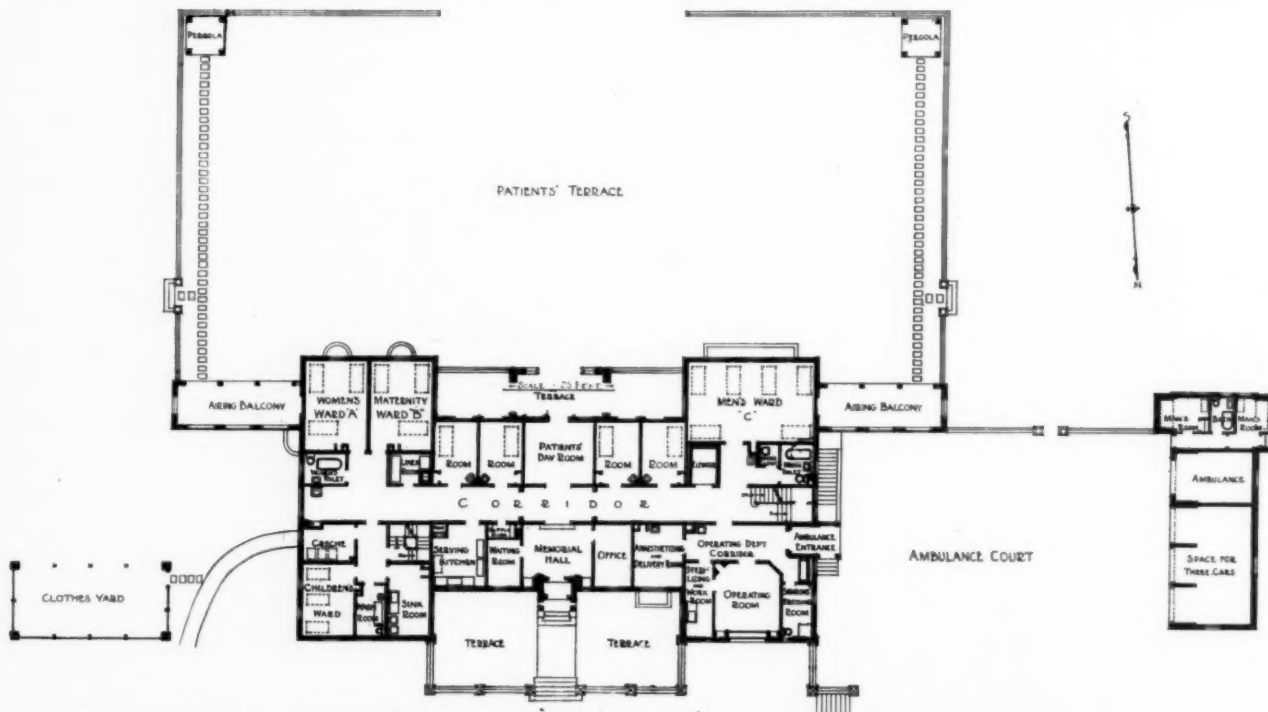


Fig. 3. First floor plan, with patients' terrace and ambulance court.

work of the landscape architect. The outlook to the south, over the rolling farming country of Ipswich, affords an ever-interesting and changing view for the patients, as every window and every airing balcony commands this view, which is enhanced by a patients' court about 200 feet square, surrounded by a low brick wall, with a small summer house at the exterior angles of the court. Flower beds and shrubs add further to the pleasure of the patients.

In the plan adopted, the patients are located generally on the south side of the building. The airing balconies, which are commonly placed at the south, were in this case made as cloisters extending to the east and west, with full opening to the south. Openings to all private rooms allow the beds to be wheeled into the open air.



Fig. 4. Entrance to hospital, showing superintendent's office and memorial tablet.



Second Floor



First Floor



Basement

Fig. 5. Basement, first and second floor plans of the Benjamin Stickney Cable Memorial Hospital.



Fig. 6. Operating room, showing method of natural and artificial lighting. Note the dark tile walls, built-in cabinets, and double window with heating units between glass.

light for operating rooms is eliminated and the wall light carried above the ceiling line, giving practically the same lighting as if carried on the ceiling, but avoiding the ugly skylight features on the exterior.

The children's and maternity departments are complete.

In the service court, the garage building affords both storage for the ambulances and living quarters for the orderlies.

The elevator is run by electricity, and the cooking, sterilizing, and vacuum cleaning are also done by the same means.

The exterior of the building is in the Georgian style of architecture, with red brick and white marble trim. The walls around the forecourt and patients' court are of the same material.

While the interior details are simple, as befits any building for the care of the very ill, nevertheless the entrance or memorial hall has a slight claim to architectural detail. A bronze memorial tablet, mentioning the name of the man in whose memory the building was erected, occupies a prominent space.

The furnishings and coloring of the interior were carefully selected, not only for utility but for a therapeutic effect on the patient as well.

WALTER REED MEN LEARN TO FARM

Thirty Men From This Hospital Will Train at Lawrenceville, N. J.—Complete Farming Equipment, Including Live Stock, Has Been Prepared for Them—
Farming to Be Adapted to Needs of the Northeast

"Thirty Sign Up for Farm Life," is the heading of a column in the *Come-Back*, a regular newspaper, published by a bunch of "regular fellows" at the Walter Reed General Hospital. "Walter Reed," says the paper, "is as full of morale as a poison ivy vine is full of itch. . . . Every-

body at the post is either working or getting ready to work—and at some job that will mean something when he gets back into those old 'civvies.'"

The plan for training in farming outlined for the men will not hold them in service but will hasten their release. The farm is to be conducted at Lawrenceville, N. J., and will be operated jointly by the army, the Federal Board for Vocational Education, John D. Willbank of New York, and the Surgeon-General's office. It is to be adapted particularly to the needs of men who wish to farm in the northeast.

At present there are on the farm 35 Holstein cows, 11 heifers, 15 breed sows, 8 horses, and several flocks of poultry. The farm is of 535 acres, and the government is building two barracks for the men. There is a full line of machinery, including three tractors and two autos; a sewage system; a Deloc lighting system; and water works. Water is drawn from a 200-foot well. The present plan is to allot plots of ground to each man for truck and garden work. Two hundred acres will be used for general farming, 100 acres for truck farming, and 100 for pasture and woodland.

A chance for academic studies will be given the men in the next few months. Among the farm courses will be studies in bees, seeds, soils, fertilizers, house and home management, and farm management. In the spring the regular farming operations will begin in earnest.

Two medical officers will be at hand to attend the men, and men suffering from arm or leg ailments are not encouraged to sign up for this work.



These men find healthful and profitable work in the truck gardens of the Letterman General Hospital, San Francisco.

Normal Men Though Blind

Normal men doing without their sight—that is Sir Arthur Pearson's ideal for his blind soldiers at St. Dunstan's, an ideal which most of them rapidly achieve.

Crocker, who was making the typewriter click one day as Sir Arthur passed, had been a miner before the war and had been a pupil at St. Dunstan's for only six weeks.

"Who is there?" asked Sir Arthur.

"Crocker, sir—writing a letter to my mother."

"And how are you getting on?"

"Fine, sir!"

"Did you know anything about a typewriter before the war, Crocker?"

"No, sir—I'd never seen one!"

Crocker's life will not be wrecked by blindness—nor the lives of the six hundred other men whom St. Dunstan's has already started in the world.

A HOSPITAL LIBRARY AND SOME OF ITS BY-PRODUCTS

A Unique Experiment in the Establishment of a Hospital Library Which Later More Than Justified Its Existence—Inexpensive Yet Important Addition in Its Personal and Human Appeal—How Volunteer Help Aided Barnes Hospital in Solution of Problem

BY ELIZABETH GREEN, LIBRARIAN BARNES HOSPITAL, ST. LOUIS

MY experience in libraries is confined to the Barnes Hospital library, which came into existence three years ago, shortly after the open-



Fig. 1.—Bookshelves in the record department house the books which are issued to patients, doctors, nurses, and employees.

ing of the Barnes Hospital. Our location overlooking Forest Park, though ideal for fresh air and charming scenery, was rather inaccessible to libraries; so a very real need soon made itself felt and stimulated us to start a library of our own.

The first problem to settle was where to put the library and who should supervise it, for it was out of the question either to give it special space or to put a special person in charge of it. The record department had shelf space which it could spare, and its hours made it possible to keep the library open all day. In addition, the department force felt that they could handle the issuing of books along with the record work, and these decisions determined both the possibility of having a library and its location. The second problem was to secure books, and here the St. Louis Public Library, through its traveling library department, came to our rescue by giving us a collection of seventy-five volumes with which to begin. Presently the Washington University Training School, the nursing department of the Barnes Hospital, turned over such books as they had, to be issued along with the books from the traveling library. This increased our collection to about one hundred twenty-five books.

Word spread through the hospital that we had a library and that anyone who wanted to read

could get a book by going to the record room. An immediate response followed, and in our first year we issued books to private patients, ward patients, doctors, nurses, and in fact to almost every type of employee in the hospital. This, however, was only the beginning. Friends outside of the hospital, hearing of the venture, let others know of our need, and many books were sent us, until now our library is limited by our shelf space and numbers some twelve hundred volumes. What might seem a hit-or-miss way of gathering a library has proved to be a very nice collection of books. We have some of the classics, many novels, books of travel, biography, poetry, religion, history, and essays, works in foreign languages, and technical and juvenile books, all of which are used by our reading public. In accepting gifts of books, we reserve the right to turn over any book that is not useful to us to someone or some library where it will be of use.

When our books wear out we give them to the traveling library, which, as part of the St. Louis Public Library, has them rebound in its bindery and reissues them to the Barnes Hospital Library. This keeps our library in good repair at no expense to the hospital, and lengthens the life of the books we want most. Unless some such arrangement could be made, we should be deprived of the volumes most desired.

The supplies needed are few. Fifteen hundred cheap cards, four by five inches, and library paste,



Fig. 2.—Book day in the ward sitting room has often an important psychological effect on patients.

are about all that we have used. Book pockets are made from the pasteboard backs of blocks of paper, and the making and pasting of them in new books is done by volunteer workers.

Volunteer workers come once a week to issue books to the wards. Each worker selects a number of books and carries them with her to the ward chosen, after which, with the approval of the head nurse, she approaches the patients with the question, "How would you like to read a book?" It is interesting to watch a new patient the first time he is approached by a volunteer. Usually his face evinces a look of distrust, and almost always he asks the question, "How much does it cost?" When he finds that the book can be had for nothing, the look of distrust gives way to one of real pleasure, and, even if the "specs" that make reading possible have been left at home, he is glad to have the chance of talking for a moment with the volunteer. This giving out of books brings a very human element into the hospital, for here are non-professional people doing something for the hospital and patients other than ministering to their bodily ills, and the patient feels that there is a very personal, everyday kind of interest in his happiness and contentment, as well as in his physical condition, which contributes much to the spirit of the place. The patient who is in the hospital a long time looks forward to "book day," and if a volunteer is late in arriving or if the weather is bad, she often hears, "We thought you wouldn't come today, and I have nothing to read; I have finished my book." Some of the wives of our visiting physicians have been among our volunteer workers, and to them and our other friends who have given so faithfully and unsparingly of their time, cheer, and energy, we owe a debt of gratitude.

Another aspect of the work of a library in a hospital, and one of especial interest, is the relation which a carefully selected book may have to the treatment of a patient. Take your exophthalmic goiter cases. If you can manage to interest without unduly exciting, you contribute to a frame of mind that undoubtedly helps. In such a case, reading might be regarded, without drawing too long a bow, as a therapeutic measure. Or, take your orthopedic patient on a Bradford frame, who for weeks has to lie in bed in such a position that reading small print or holding a heavy book is a bad thing. Give such a patient a small, light book with big type, and you bestow a real pleasure without much risk of eye strain, or much fatigue from holding a book.

It is important, in the selection of your library, to remember that books with small type and

glazed paper are poor things to give a patient in bed, where the position at best is not ideal for reading. There are editions of big-type books on the market, and it only needs the stimulation of demand to give us a greater choice of literature in this desirable edition, which is grateful equally to those with tired eyes and to bedridden persons. Show your neurologist that you have an interest in helping him find books for the patients whom he desires to have read, and see how glad he is to have someone supply his patients with the type of books he thinks may help them. It is fascinating work, and the calls are not so many that the time can not be spared for it.

The library at the Barnes, instead of proving an undesirable addition to the record room, has brought to it, with its element of human relation, something that has been a relief rather than a burden. It serves as a refreshing contrast to the close application of record work, and often the library provides an amusing incident that furnishes relief to the more serious work of indexing histories.

Our scheme for running the library is to issue books for two weeks, and, in order to insure getting them back promptly, we have instituted a system of fines. Patients are exempt from fines, however, for, being dependent on others, they can not be held responsible for the return of books. The fines collected are sufficient to pay for paste and cards, leaving a surplus, which, if applied to time given by the record department, would cover all costs.

There is much to say in favor of the endowed library. What a pleasure to convalescent patients to have a cheerful room with tables, comfortable chairs, and writing materials, where they can get away from the somewhat bleak and cheerless spotlessness that is necessary in most parts of a hospital and where they can forget for a time the "hospital atmosphere"! What a field for original work to a librarian with a large social outlook! Just the same, a library without costs is a possibility for every hospital, and such a library might later become endowed. But, even if the library runs along without much time spent on it by the hospital employees in charge, it can be made a real joy and do a lot of good. I think we can safely say that the Barnes Hospital Library has been self-sustaining always. The issue the first year was 2332 books, the second year, 4047, and the third year, 4786, showing a material increase each year. We feel that the library has become a real part of our hospital life, and one that is of intrinsic value both from its social and therapeutic aspects.

THE BRAVE BLINDED SOLDIERS OF ST. DUNSTAN'S HOSTEL

Theirs is a Form of Heroism Which Needs to Be Renewed Every Day—At St. Dunstan's They Learn to Play and Work and Regain Their Independence—Sympathy, Not Pity, Is What They Need—Their Lives Are an Inspiration to the World

BY SIR ARTHUR PEARSON, FOUNDER AND DIRECTOR OF ST. DUNSTAN'S HOSTEL FOR BLINDED SOLDIERS, LONDON, ENGLAND

THE heroism of these blinded soldiers no one can doubt. It was proved on the field of battle, but how much more since they have lost their sight and have now to fight the battle of life in darkness! It is a form of heroism which needs to be renewed every day—one might say, every moment of every day. The ambition of these men is to be once again normal citizens—like others in their capacity for happiness, like others in fruitful effort. And if they succeed in this ambition, if they surprise everyone by their courageous outlook and by what they are able to accomplish, it is not because it is easy to overcome their handicap, but because they are filled with the spirit which will not be conquered.

When they come from the hospital to St. Dunstan's they are like men who begin an existence which is new. They live and work in the night. They must learn again to walk—for those who walk in the night do not walk as those who walk in the day. They must learn again to read and write, and in the workshops they begin to make things, clumsily at first as a child—these men who will so soon become skilled craftsmen. They have to learn again to play as well as to work, and in moments of rest and quietness to be without the distraction of passing events or the delight of the natural beauties about them. Yet in their heroism they will not sit staring into the blackness, but exert themselves to see visions, by the use of memory and by the power of imagination creating scenes that are, as it were, cut off from them by a curtain. And if, when the blinded man walks on the sands, he sees the blueness of the waves, it is by an effort which is, at the bottom, heroic; if, when the touch of spring is in the air, he sees the tender foliage on the boughs of the trees, and the flowers on the wayside banks, it is because his courage will not permit him to be shut off from these simple enjoyments.

It is the magic of hope which makes this heroism possible on the part of the blinded men who come to St. Dunstan's. They are not allowed to know that period of despair which might result in a melancholy which would be almost unconquerable. They are visited directly they arrive at the hospital, and those who are themselves blind speak to them of hope. They learn what others, blinded like themselves, have done and are

doing; they are told of men wounded in this same war who have already learned to walk with independence in the darkness, to read and write Braille, to use a typewriter, to master one or two trades, to become so proficient in these trades that they can earn more money than they were able to do as sighted men before the war, who have been set up in business for themselves, and who, looked after always by the organization of St. Dunstan's, are now living a home life made almost care-free by the liberal pension allowed by the government, by the provision made for their children, and by the amount of money which by their own skill they can earn.

To the blinded soldier still lying in his cot in the hospital ward come dreams that do not vanish at dawn; new horizons appear; he is already inspired to set out on a voyage of discovery through the night that lies before him, and from the moment that he arrives at St. Dunstan's he finds in the reality of the present an intense and absorbing interest.

Nothing in my experience is perhaps more extraordinary than this: A blinded Canadian soldier arrived one day from hospital at St. Dunstan's and, like all new arrivals, after his first interview with me, was taken over the building, through the class rooms and the workshops and the grounds. On his return I asked him whether he had been happily impressed. He answered, "Yes, sir, only I cannot believe that all these men are blind." This man, himself unable to see, had yet gained such an impression of the cheerfulness and the activity of the men he had encountered wandering in the garden or at their daily tasks that it seemed to him impossible that they were, as he was, blind.

It is a claim I am justified in making that St. Dunstan's is one of the most cheerful places in the world. To the public I say: "Do not pity these blinded men; give them all the sympathy in the world, give them all the help you possibly can, encourage them all in their growing spirit of independence; when you walk with them guide them as little as possible, when you talk with them do not talk to them as men cut off from all the beauty of the world and of the passing interests of the day. If they have set themselves to forget what they have suffered and what they

are suffering, is it for you to remind them? Do not pity the blinded soldiers, but understand them. Let your consolation take the form of encouragement and sympathy; be patient. Of all the handicaps that a man may have to face in his own person, blindness is the most appalling, and, though these men rise superior to it, it does not change the fact that they are blind, without sight of sun, or moon, or star throughout the year, or man, or woman. They can never see again the homes to which they have returned from the trenches; they can never see again one

ray of color, or one sign of movement. Yes, it is necessary to be patient with such men in their moods. It is necessary also to remember that they are wonderful; by their bearing, which is so resolute, and by their courage which is so unflagging, they are creating a new interest among the public, in the whole world of the blind."

There is inspiration for everyone in the deeds of these men whom it is my special privilege to look after, both at St. Dunstan's and in the home life to which they will return when they have learned to be blind.

ATTITUDE OF THE MIDDLE AGES TOWARD THE CRIPPLED AND DISABLED

Antiquity Reveals Physically Handicapped as Helpless Beggars, Provided for Through Casual Almsgiving—Middle Ages Exploits Deformity as Material for Comedy—Heartless Ridicule, Inhuman Brutality, and Ignorant Superstition Characterize Attitude Toward Cripple to End of Eighteenth Century—The Dawn of a New Era

BY DOUGLAS C. McMURTRIE, DIRECTOR RED CROSS INSTITUTE FOR CRIPPLED AND DISABLED MEN, PRESIDENT FEDERATION OF ASSOCIATIONS FOR CRIPPLES, NEW YORK CITY

HISTORICAL evidence demonstrates clearly that the crippled and disabled man has always been discriminated against by the community. In antiquity the physically handicapped were treated with a special cruelty, and even with the advent of the Middle Ages there was little improvement in the direction of more constructive treatment.

In 590 A. D., St. Gregory reformed the administration of the church and of charity in the city of Rome in an elaborate manner, one of his provisions being that the sick and the infirm were to be superintended by persons appointed to inspect every street. But the recognized mode of providing for the disabled remained in general what it had been in earlier times—almsgiving in response to begging. In Constantinople pauperism became so extreme during the fourth century that the Emperor Constantine decreed that all able-bodied beggars were to be condemned to slavery; the inference that beggary was to be reserved for the disabled is quite apparent. In Queen Elizabeth's day, more than a thousand years later, we meet the phrase "sturdy beggars" with a similar implication. Between these dates we have Charlemagne's order that no one was to presume to

give relief to able-bodied beggars unless they were set to work.

In all justice to the Middle Ages it must be pointed out, however, that casual almsgiving was not the sole relief provided. The church was actively engaged in relief work, at first on a paro-



Fig. 1—A Procession of Cripples, by Jerome Bosch, a fifteen-century painter who showed a special predilection for cripples as subjects.

chial, then on an institutional, basis. Side by side with the centers established in the monasteries, there grew up a system of endowed charities, also under church rule, for the care of the "poor" and the "sick" and others in need of aid. It is fair to assume that the crippled and the deformed were included in these categories, al-

though specific mention of them rarely occurs. Thus, along with other hospitals established at Canterbury in England during the twelfth century, there was one for "poor, infirm, lame, and blind old men and women." That all these institutions provided relief of the most primitive kind only need not be emphasized.

Before pursuing further the gradual evolution of the relief afforded the crippled and the deformed, it will pay to consider the use which ancient and medieval society made of these unfortunates.

As it developed in luxury and culture, antiquity found a characteristic employment for some types of the deformed, especially for the dwarfed and

how some Roman masters exploited deformed slave children as beggars. If, as they grew older, their deformities were not conspicuous enough to excite compassion, the poor creatures were intentionally crippled to an even greater extent; their arms were cut off and their shoulders twisted so that they became humpbacked. If the day's earnings were not sufficient, the master rebuked the wretches, saying: "You have brought in too little, bring hither the whip; you can weep and lament now. Had you appealed thus to the passerby, you could have had more alms and you could have given me more."

The Middle Ages, like antiquity, exploited the appeal that physical deformity makes to a primitive sense of the comic. The court fool or jester was to be found almost universally in the retinues of princes and often in the households of noblemen. The type which literature has seized upon and immortalized was characterized less by physical deformity than by a certain superficial quickness of wit and power of repartee; by far the greater number, however, consisted merely of creatures who, by reason of deformity of mind or body, were calculated to excite heartless laughter or ridicule. The institution was firmly entrenched for many years, despite many tendencies operating to improve the situation. Even a number of decrees passed by the Reichstag in the sixteenth century failed to obviate the practice. Not until the Enlightenment was the custom abolished.

Even after this time, the court fool was still in vogue in the Russian court, Peter the Great having so many jesters of this type that it was necessary to divide them into classes. When the Spaniards under Fernando Cortez accomplished the conquest of Mexico, court fools and deformed human creatures of all kinds were found at the court of Montezuma.

Seneca's picture of the inconceivable brutality of some Roman masters has its medieval pendant in the picture drawn by Sebastian Brant in his "Narrenschiff." This German satire was done into English by Alexander Barclay in 1509, under the title of "The Ship of Fools." The following is a slightly modernized quotation from Barclay's version:

Some other beggars falsly for the nones
Disfigure their children, God wot, unhappily,



Fig. 2.—The Disabled (*Les Estropiés*), by the sixteenth century Flemish artist, Jan Breughel.

the grotesquely shaped. There are extant ancient Greek representations of comic figures of this sort—forerunners, possibly, of the medieval court fool. Attic comedy made constant use of actors padded to simulate various types of deformity. The tradition that has come down to us with regard to Æsop presents the author of the fables as born to slavery and deformity; and, although modern historians seem to be doubtful as to whether Æsop ever existed or not, it is significant that tradition has created such a personality and that the oldest writer to mention his person speaks of his appearance and his voice as contributing as much as his stories to the amusement of his company.

But this comic exploitation of deformity, brutal as it must seem to us, is the brighter side of the picture. Seneca has left an appalling record of

Mangling their faces, and breking their bones
To stir the people to pity that passe by.
There stande they begging with tedious shout and
cry,
Their own bodies turning to a strange fashion
To move such as passe to pity and compassion.
Heartless ridicule, inhuman exploitation, and,



STEPHAN FARFFLER,
Uhrmacher in Altdorff.

*Auch inventor eines Wagens mit 3. Rädern, darauf
er sich, weil er Lahm war, selbst herum gefahren,
welcher in der Nürnbergschen Bibliothec*

*gezeigt wird.
Starb A. 1609. d. 24. Octobr.
im 57. Jahr Seiner Alters.*

Fig. 3.—Stephan Farffler, watchmaker in Altdorff, also inventor of a three-wheeled wagon, which, because of his lameness, he wheeled about by himself. This is a copy of an engraving in the Nuremberg Library. Farffler died in 1609 at the age of 57.

with it all, "pity and compassion!" Add to this the superstitions—the belief in "changelings," in the "evil eye," in satanic paternity, which the medieval mind generally advanced by way of "explaining" deformity—and the strange picture is complete.

If space permitted, it would be instructive at this point to consider in detail the rôle the cripple has played in literature. Allusion has already been made to Thersites, who serves Homer not only as a foil to the heroic splendor of Achilles

and Ulysses, but also as a maker of trouble and sower of discord. In the Siegfried saga, the dwarf Mime plays a similar part. And in Shakespeare's Richard III we have a classic presentation of the cripple as "villain." In the opening monologue of the play, Shakespeare gives us a glimpse of the psychology of the cripple as he conceived it:

But I, that am not shap'd for sportive tricks,
Nor made to court an amorous looking-glass;
I that am rudely stamp'd, and want love's majesty
To strut before an ambling wanton nymph;
I that am curtail'd of this fair proportion,
Cheated of feature by dissembling nature,
Deform'd, unfinished, sent before my time
Into this breathing world, scarce half made up,
And that so lamely and unfashionable
That dogs bark at me as I halt by them;
Why, I, in this weak piping time of peace,
Have no delight to pass away the time
Unless to see my shadow in the sun
And descant on mine own deformity,
And therefore, since I cannot prove a lover
To entertain these fair well-spoken days,
I am determin'd to prove a villain
And hate the idle pleasures of these days.
Plots have I laid, inductions dangerous,
By drunken prophecies, libels, and dreams,
To set my brother Clarence and the King
In deadly hate the one against the other;
And if King Edward be as true and just
As I am subtle, false, and dangerous,
This day, etc.

Shakespeare's learned and philosophic contemporary, Lord Bacon, in his "Essay on Deformity," strikes a similar note, holding that "deformed persons are commonly even with Nature; for as Nature hath done ill by them, so do they by Nature, being for the most part . . . void of natural affection."

Writing almost two centuries after Shakespeare, Schiller, in his earliest play, "The Robbers," presents an interesting parallel to Shakespeare's Richard III in the figure of Franz Moor.

I have potent reasons to be out with Nature [says he] and on my honor I shall press them all . . . Why did she burden me with this load of ugliness? Why me, of all people? . . . Verily, I believe she threw into a single heap all the despicable elements of mankind, and baked me therefrom. Death and devils! Who gave her the authority to dower others with this and that, and to withhold these things from me?

Later he cries out, pathetically enough, as if with a laugh of grim irony:

But is it just to damn a man because of his deformity? In the most wretched of cripples there may shine a great and lovable soul, like a ruby buried in mud.

In conformity with medieval tradition, Goethe in "Faust" provides Mephisto with a limp. Stevenson's genial cutthroats in "Treasure Island" are variously mutilated; and even one of our own

present-day novelists has a penchant for legless and one-eyed villains!

But, from the end of the eighteenth century down, literature has grown increasingly rich in imaginative works that are not obsessed with this idea of a relation between physical and moral deformity. From Quasimodo to Little Eyolf, from Tiny Tim to Richard Calmady, the cripple has been presented with a freshness of vision and a realistic insight that mark the dawn of a new era for this social castaway. Perhaps the change can not be more strikingly indicated than in the following translation from "an old manuscript" first published in 1806; in its lonesomeness, its resignation, its poignant imagery, the little poem is a most revealing bit of the true psychology of the cripple under adverse social conditions:

Dear hand of God!
 Lighten my heart,
 Help me to find
 Fun in my smart.
 Methinks the dear Lord
 At toss-ball doth play,
 The harder he strikes me,
 The higher my way.

Or am I a sapling
 A garden within,
 God is the gard'ner
 And bends me to Him,
 He cuts me and prunes me
 And bends every limb,
 So I may grow upward
 And nearer to Him.

Oh, let me proclaim it,
 God cuts to the bone,
 He chips me and hews me,
 But I make no moan,
 You marvel and wonder?
 I think it His wish
 To sculpture an angel
 Out of my flesh.

The dawn of a new era! It is probably fair to say that the old era was summed up and the new era prepared for by a Spaniard named Vives who published a book early in the sixteenth century on the subject of the management of the poor, a book which was translated into several languages and widely read. Vives divided the poor into three classes: those in hospitals and poorhouses, public homeless beggars, and the poor at home. He proposed a census of the poor in each town and the collecting of data as to the causes of distress. Then he planned the establishment of a central organization of relief under the magistrates. Beggary was to be strictly prohibited, and work was to be provided for all. The non-settled poor who were able-bodied were to be returned to their native homes; the able-bodied settled poor who knew no craft were to be put on

some public work, the undeserving being set to hand labor; for the others, work was to be found, or they were to be assisted to become self-supporting. Hospitals were to be classified to meet the needs of the sick, the blind, and the insane. Funds were to be obtained chiefly from private sources and from the church.

The Sorbonne approved this scheme; the city of Ypres put it into effect in 1524; and similar plans were adopted in Paris and elsewhere. Queen Elizabeth's Poor Relief Act of 1601 was largely based on it. It was an ambitious scheme for the administrative technique of the age; but, whatever its success, it had in it the seed of a rational approach to the problem of the poor in general, and of the disabled and the deformed in particular.

Influenced, it may well be, by this Spanish book, President de Pomponne de Bélièvre founded in France in 1657 an asylum in which the infirm could find suitable work. Despite several sporadic imitations of this project, which later became the Salpêtrière, the early measures did not in a strict sense mark the beginnings of care for cripples, but they operated to the ultimate advantage of those who, by reason of their infirmity, were cast upon the pity of their fellowmen. The actuating motive of provision in many cases, however, was utilitarian in character. One object—an object avowed by Vives, for instance—was that all crip-



Fig. 4.—The Cripple, by J. Callot, a French artist who took cripples and beggars for his subjects.

ples might be so confined that they should not annoy the community by their deformed appearance, and the streets and highways be rid of beggars.

Some of the many monasteries which had not been utilized since the time of the Reformation

were thrown open and converted into orphan asylums, madhouses, or penitentiaries. In the establishment of the various institutions, the cripple was frequently considered. For instance, those handicapped by deformity were provided for at a hospital for wretched and pauper invalids established at Pforzheim in 1722 by Count Luitgard of Baden. This was later transformed by Count Charles Frederic of Baden into an orphan asylum, making especial provision, however, for young and old cripples. According to the official ordinance creating this institution, the third class of inmates was to be composed of "those who have such physical defects that they are an especial abomination and disgust to other men whenever they come into their sight." The cripple department was, however, abolished in 1808, probably because the quarters were needed for the insane.

Such provision for cripples, however, gave them

asylum only and did nothing to better their condition. The rise of the science of orthopedics was responsible for the ensuing improvement. The theories of the various orthopedists were best put into practice in an institution, and a large number of these were founded in the first decades of the nineteenth century, as, for example, those located at Paris, London, Leipsic, Lübeck, Berlin, Vienna, and Stockholm.

The first institution in the world with an all-around program for ameliorating the lot of the cripple was established in Munich in 1832, but this was devoted particularly to the care of crippled children. A long period followed before the creation of the second establishment of the same sort, which came into being in Copenhagen in 1872. From this time on, the number of schools for crippled children rapidly increased. But for the care of the disabled adult there was no provision at all.

JOINT PURCHASE OF HOSPITAL SUPPLIES

How the State Hospital Commission of New York Successfully Purchases for Thirteen State Hospitals—Personnel of Purchasing Committee—Enforcement of Contracts

By T. E. MCGARR, STATE HOSPITAL COMMISSION, ALBANY, NEW YORK

FOR twenty-five years past the insane hospitals of New York state have followed a system of joint purchasing of food, fuel, medical supplies and general equipment under a plan evolved by the State Hospital Commission after considerable preliminary study of possible economies, maintenance of suitable standards of supplies, and methods to insure the delivery of goods contracted for. Even though war conditions have somewhat dislocated its well-running machinery, the results of the purchasing committee's work have been most satisfactory, both to the supervising hospital commission because of proved economy of the system, and to the officers, employees, and patients of the hospitals, because of the excellent standards maintained in the contracts made.

In the administration of public charities, economy alone should not be the paramount aim of supervisory bodies. In our state it is of much greater importance that our sick family of 37,000 patients shall have suitable grades of food, medical supplies, and equipment, and that the responsibility of contractors shall, at all times, be enforced to the letter. To this end, analyses of coal, flour, food supplies, including dry and wet groceries, are frequently made at the chemical laboratory established by the committee.

After an experience of several years with joint purchasing methods the hospital commission de-

cided that, while individual hospitals should be represented in a central agency to bring about the best results, the committee must be composed of medical superintendents, assisted by hospital stewards whose knowledge of general and local markets would be of value. Accordingly, some eight years ago the present purchasing agency was established, consisting of three hospital superintendents, two hospital stewards, and a representative of the hospital commission. Two advantages result: first, the physical well-being of the patients so far as proper food supplies contribute thereto, is insured; and, second, the presence on the committee of hospital stewards with more intimate knowledge of markets and familiarity with business methods has resulted in the constant practice of prudent economy.

All purchases of food supplies under joint contracts are based, as to quantities, on a ration allowance originally recommended in 1901 by the late Professor Atwater and later modified as a result of hospital experience. A series of weekly dietaries suitable to the needs of the different types of patients under treatment is prepared at the individual hospitals by the steward, with the assistance of the dietitian. The preparation of these dietaries requires experience and judgment of a high character. In certain of our hospital buildings in which all newly received and

acute cases are quartered and in which the grade of treatment closely approximates in many details the standards maintained in general hospitals, the per capita cost does not fall much below \$14 per week, an indication that our state leaves nothing undone for the active treatment and recovery of its insane patients, and particularly of those belonging to the recoverable class. In the departments for the old and infirm—especially in those in which the women patients are quartered—the dietary can properly be reduced to the minimum cost, as these aged patients are always entirely unappreciative of different grades of food supplies.

Briefly, the program of the committee in making joint contracts is as follows:

At stated intervals throughout the year each of the thirteen state hospitals forwards to the revision department of the State Hospital Commission a statement of its needs in the line of such articles as have been found, through the experience of the purchasing committee, suitable and advantageous for joint purchase. As soon as revision of the quantities and grades has been completed, the committee attaches to the quantity sheets the specifications and bidding blanks covering the goods, and, after due advertisement, supplies these to all applicants. Upon the day set for the public opening of the bids, very careful attention is given by the entire committee to the standing of bidders and to the quality of the samples. The prices submitted cover deliveries practically to hospital storehouses, and surety bonds are exacted from the contractors. Through such preliminary precautions the purchasing committee has found very few causes for complaint against contractors, and the number of cancelled contracts has reached the vanishing point.

Upon the completion of contracts made by the purchasing committee, notice to that effect is forwarded to the state hospital stewards with full information as to grades, quantities, and times of delivery. Each hospital orders these contract goods directly from the contractors in such quantities as its necessities require and storehouse accommodations permit.

The State Hospital Commission has recently authorized a plan under which our hospitals exchange with one another, whenever desirable (and whenever stewards can agree as to the *quid pro quo*), any excess of fruits, vegetables, or other supplies grown on the respective farms.

In establishing a joint purchasing agency, the State Hospital Commission was careful to limit its activities to those larger hospital staples the purchase of which in bulk would insure prices that could not be secured by individual hospitals in local markets, recognizing the fact that to the

respective hospital stewards should be given the privilege of purchasing locally, after proper competition, supplies of an emergent character and of taking advantage of seasonal conditions existing in the hospital neighborhood. Thus, during a recent general shortage of fruit crops, a remarkable surplus was shown in the western part of our state, and two of the hospitals of that district were able to secure high grade apples at a remarkably low figure. Also, whenever unusual congestion of market conditions arises, hospitals located in the metropolitan districts are often in a position to buy for cash goodly stocks of supplies or equipment at prices which could not be secured through the committee's contracts if these were to extend over three or six months or longer. Information as to such opportunities is communicated to all hospitals by the committee after it has satisfied itself as to the quality of the goods.

An interesting feature as to the joint distribution of supplies in our state has been made possible by the establishment of a central coffee-roasting plant, at one of the state hospitals which has been placed under the supervision of a steward member of the purchasing committee. Coffee bought in the green berry in large quantities is carefully roasted at this plant and delivered to the hospitals throughout the state at an extremely low rate. But one grade of coffee is supplied to officers, employees, and patients.

At this hospital a central printing and binding establishment is also maintained at which are printed the blanks and record books required by the State Hospital Commission and its different branches and by the hospitals. At this plant, also, are printed the official *State Hospital Quarterly* and the official handbook of the State Hospital Commission, many of the hospital patients being employed in this work.

Some idea of the scope of the committee's work may be gained from the fact that five million pounds of fresh meat and forty thousand barrels of flour are required annually for the thirteen state hospitals and are covered in the committee's joint contracts. Coal contracts alone total nearly one million dollars in value.

The cost of maintaining the state hospital joint purchasing agency, including all salaries, supervision, clerk hire, chemist, maintenance of laboratory, etc., is extremely small, amounting, during the last full year, under expensive war conditions to less than 0.5 per cent of the total amount of the goods purchased. A measurable degree of success may confidently be claimed in the results thus far shown by the committee as now constituted, and, as pre-war conditions return, still higher achievements may confidently be expected.

REEDUCATION FOR MAIMED AND DISABLED OFFICERS AND PRIVATES

Results from the Use of Artificial Limbs—War Risk Insurance Bureau, U. S. Public Health Service, and Federal Board for Vocational Education Cooperate in Rehabilitating the Disabled Man

BY J. O. COBB, M.D., SENIOR SURGEON, UNITED STATES PUBLIC HEALTH SERVICE, CHICAGO

WHEN officers and privates are discharged from the army and navy for disability, they fall automatically under the care of the War Risk Insurance Bureau. The principal function of this bureau is to furnish promptly the means and artificial limbs or other appliances necessary to enable these disabled men to adopt suitable vocations, where they may be able to earn part or all of their livelihood.

Very satisfactory service can be obtained by the use of artificial limbs, depending largely, of course, upon the points at which amputations have been made, and whether one or both limbs have been lost. Patients with an amputation below the elbow of one arm only, have the widest range of usefulness. Some of these men learn to use the artificial fingers and hand with astonishing efficiency, especially in conjunction with the good hand. Even with both arms off below the elbow, it is gratifying to watch such men use tools, or mop and sweep, or spade and shovel. The handling of a wheelbarrow is an easy matter for them.

Where the amputation is above the elbow, the varied usefulness of the artificial arm is much less efficient. One would hardly expect that a useful artificial arm for a shoulder joint amputation could be constructed; such is not the case, however, for, with only one arm missing, these men can carry grips or bundles, raise their hats, salute, tie their neckties, and dress themselves. The most difficult problem for the manufacturer of artificial arms is the double amputation at the shoulder joints, or of both arms above the elbow, but these, too, have been mastered to a large extent. These cases are able to help themselves in many useful ways, such as feeding themselves, carrying bundles, using the wheelbarrow, and using specially made tools, etc.

The loss of a leg is not such a calamity as the loss of an arm. An amputation of one leg below the knee is not a serious physical handicap. Double amputations of both legs are not hopeless, as such cases learn to walk without a limp, learn to dance, learn to go up and down stairs on their toes, and to walk long distances.

The physical handicaps from higher amputations are not so easily overcome, but the men who suffer from them also learn to use their artificial limbs in a very satisfactory manner.

A discharged officer or private who has suffered an amputation is sent by the War Risk Insurance Bureau to a conveniently located marine hospital of the U. S. Public Health Service to be fitted and trained in the use of his artificial limb. Considerable attention for such cases is required to harden the skin and properly mold the stumps by massage and bandaging. Then, when the use of the limb is commenced, it requires time and practice to become proficient in its use, the length of time depending, of course, upon the point of amputation.

In thousands of cases mutilations from shell wounds or loss of limbs will necessitate vocational reeducation. This education is being supplied by the Federal Board for Vocational Education, with special schools conveniently located in the populous centers of the country. In these schools those whose injuries or diseases are such as to unfit them for their former occupations are taught vocations suitable and adaptable to their changed and unfortunate conditions.

Life is not altogether hopeless and meaningless if one possesses the physical means of earning a livelihood, and this the War Risk Insurance Bureau and vocational schools are making possible for the diseased and maimed soldier with astonishing and gratifying results.

The Story of the Pictures on the Opposite Page

Fig. 1. An artificial limb in position. The surgeons here are making a careful analysis of the working of this man's arm.

Fig. 2. This is the way the arm looks when it is detached. This same mechanism, directed by its owner, can pick up objects from the table, carry satchels, etc., and use a variety of instruments with remarkable results.

Fig. 3. This young man slips on a couple of arms like a pair of gloves. His independence is complete, for he is about to show the interested by-standers how he puts on the artificial arms and harness unassisted.

Fig. 4. A broom is not, perhaps, among the most useful instruments which a man with an artificial arm can wield, but, if the need arises, there is nothing about it to prevent its operation. He experiences no difficulty in keeping his front doorstep clean.

Fig. 5. Showing the muscles of an artificial arm. This mechanism is as good for picking up and carrying things as the arm which it

replaces. The patient can also give a military salute, slip on his coat, shave himself, and tie a four-in-hand.

Fig. 6. Shaking hands and patting old friends on the back are among the minor acts of life which do not need to be given up by the man with an artificial arm. This man could be said in truth to have a "grip of iron."

Fig. 7. This man has amputation of right shoulder joint and middle of left humerus and arm. He is shown carrying his satchel and hat. He has taken his hat from his head unassisted.

Fig. 8. United States Marine Hospital, Chicago, is one of the various hospitals in the United States where the medical work in connection with the War Risk Insurance Bureau is performed by medical officers of the United States Public Health Service.

Fig. 9. The man shown here ascending the stairs on his toes has two artificial legs, which are made of wood, steel, rubber, and aluminum, which serve him almost as well as the legs which they replace. He can descend easily and is also able to crank an automobile.





Fig. 1. Debarcation Hospital No. 1, Ellis Island, New York, was formerly an immigration station and is now used as a clearing hospital from which patients are distributed to various special hospitals.

THE HOSPITALS OF THE PORT OF EMBARKATION

Novel and Stupendous Problems Presented in Handling the Sick and Wounded at the Port of Embarkation—Sixteen Hospitals Organized with a Capacity of Seventeen Thousand Beds—Work Consists of Conversion of Old Buildings as Well as of Construction of New

BY OUR NEW YORK CORRESPONDENT

AMONG the many problems presented to the Surgeon-General of the United States Army by the war was that of providing hospital accommodations where and when they would be needed. This required the exercise of a remarkable degree of foresight, for it was essential that the hospitals should be ready and waiting when the patients arrived.

In camps and cantonments the matter was relatively simple. The proportion of men on the sick list under the normal conditions of training is well known. The statement made by the Surgeon-General to the Senate Committee on Military Affairs in December, 1917, showed that the failure to provide adequate hospital facilities for the troops called to arms in the summer and fall of 1917 was in no wise due to the medical department of the army. That department had furnished plans for adequate hospital facilities and had urged that the hospitals be given precedence in the construction of cantonments. Moreover, specific warnings of the dangers from overcrowding and from lack of hospital room had been repeatedly sent to the Secretary of War by the Surgeon-General.

When it came time to deal with the despatch of troops overseas the problem became much more complicated. The rate at which the men were to be sent abroad was fixed at an approximate figure and plans were made accordingly. But Marshal Joffre came in person to the United States and told some inside facts to the authorities. Just what he said is not known to the public and may never be known. He must, however, have indulged in plain speaking, for the systematic and somewhat leisurely plans for transportation of troops were at once abandoned. Every available vessel in Great Britain was hurried

across the Atlantic, and our men shipped at the rate of three hundred thousand or more a month.

Every one of these three hundred thousand men was examined physically both by the medi-



Fig. 2. Debarcation Hospital No. 5, at Lexington Avenue and Forty-sixth Street, New York, formerly the Grand Central Palace.

cal officers of his own command and by medical officers acting for the surgeon of the port of embarkation. For transport purposes the Atlantic seaboard was divided into two administrative districts. The southern port of embarkation with headquarters at Newport News embraced all ports to the south while the northern port of embarkation embraced all the ports from Baltimore to the north; even Montreal, Quebec, and Halifax had representatives of the surgeon of the port, who looked after the health of the many thousand United States troops who sailed from those ports.

All the sick were detached from the units going overseas by the surgeon of the port and sent to some one of the hospitals under his supervision. Col. J. M. Kennedy, M.C., the surgeon of the port of embarkation at Hoboken, has some sixteen hospitals under his command with a total capacity of 17,000 patients. These hospitals had to be built, requisitioned, or improvised. At the embarkation camps, Camp Upton, Camp Dix, Camp Mills, and Camp Merritt, the hospital space required was provided in the camp hospitals. These were of the familiar cantonment construction and provided accommodations as follows: Camp Upton, 2,000 beds; Camp Dix, 2,000 beds; Camp Mills, 2,000 beds; and Camp Merritt, 2,500 beds.

Civilian hospitals were then taken over for immediate use. These included St. Mary's Hospital at Hoboken with 600 beds, which was renamed Embarkation Hospital No. 1, a hospital at Secaucus, N. J., about ten miles inland from Hoboken, with 285 beds, which became Embarkation Hospital No. 2, and the hospital on Hoffman's

eral Hospital No. 1 at Williamsbridge, a suburb of New York, which had been erected on Columbia University athletic grounds by private subscription, was taken over by the surgeon of the port of embarkation as General Hospital No. 1. While the Rockefeller Demonstration Hospital at Sixty-sixth Street and Avenue A, New York, a model hut hospital with forty-eight beds was maintained and operated by the Rockefeller Institute for Medical Research, which had erected it, it became for administrative purposes a part of the hospital system of the port of embarkation because the patients in it were drawn from the forces under the jurisdiction of the surgeon of the port. Officially it is known as U. S. Auxiliary Hospital No. 1. The New York Polyclinic Hospital at 345 West Fiftieth street, New York, provided 354 beds already equipped. This is designated as Debarkation Hospital No. 4.

A hospital of the cantonment type with 1,750 beds was also erected at Fox Hills, Staten Island, and named U. S. Debarkation Hospital No. 2.

The cessation of immigration left the immigration station on Ellis Island idle, and it was taken over by Colonel Kennedy, converted into a hospital of 1,086 beds, and named U. S. Debarkation Hospital No. 1.

The Hotel Nassau at Long Beach on the southern shore of Long Island about forty miles from New York, was converted into U. S. Debarkation Hospital No. 4 and provided 1,000 beds. This has since been designated as General Hospital No. 39, directly under the control of the Surgeon-General.

The Greenhut Store building, in the heart of New York, reaching from Eighteenth to Nineteenth streets on the east side of Sixth Avenue, had been unoccupied for some time and this was taken by the government and converted into U. S. Debarkation Hospital No. 3 with a capacity of 3,400 beds.

The government also has taken the Grand Central Palace, a modern building twelve stories high



Fig. 3. U. S. General Hospital No. 39 was formerly the Nassau Hotel on the ocean front at Long Beach, Long Island.

Island in lower New York Bay which had been used by the immigration authorities as an isolation hospital and which was designated as Embarkation Hospital No. 3. U. S. Gen-



Fig. 4. General Hospital No. 1, Williamsbridge, New York, was erected under the auspices of Columbia University by popular subscription on the athletic field.

containing 601,000 square feet of floor space, which occupies the block bounded by Forty-seventh Street, Lexington Avenue, Forty-eighth Street and Park Avenue, New York. This furnishes an additional 3,400 beds and is designated as U. S. Debarcation Hospital No. 5.

The equipment, organization and coordination of all these sixteen hospitals has been a tremendous task. Each institution presented a different set of problems for solution. Where a going hospital was taken over, the task was comparatively simple; the terms of lease were arranged, the skeleton staff was designated by Colonel Kennedy, and the officer put in command was allowed

to perfect his own organization, being provided with officers, nurses, and men according to the requirements of the case.

The organization of the newly built hospitals also followed well-established lines which had been laid down in the work of organizing cantonment hospitals all over the country, but the conversion of the Greenhut Building and the Grand Central Palace into hospitals presented novel and interesting problems which required the exercise of much originality and great resourcefulness on the part of the officers assigned to this duty. How these problems were met will form the subject of a later article.

HOSPITAL STANDARDIZATION CONFERENCE IN ST. LOUIS

Meeting Part of Program of American College of Surgeons to Help Hospitals Become Health Centers of Communities

A great hospital standardization conference was held in St. Louis on February 19 under the auspices of the American College of Surgeons. Preparations had been going forward for a month previously and the conference brought together hospital superintendents, trustees, medical staff members and others interested in hospitals from eastern Missouri and southern Illinois. This issue of THE MODERN HOSPITAL goes to press before the conclusion of the meeting. Next month a report of the meeting itself will be published.

The program of the St. Louis meeting was as follows:

The Occasion for the Conference, Dr. Harvey G. Mudd, Chairman, St. Louis.
 What Is Hospital Standardization? Dr. John G. Bowman, Director of the College, Chicago.
 The Machinery for the Care of the Patient: (a) Laboratories, Their Equipment and Management, Dr. L. H. Burlingham, Superintendent, Barnes Hospital; (b) Case Records, Dr. Wm. Engelbach, Professor of Medicine, St. Louis University, President, St. Louis Medical Society.
 Discussion opened by Dr. C. H. Shutt, Hospital Commissioner.
 The Hospital and Its Community (A picture of what a hospital can mean to its community), Dr. John A. Hornsby, Washington, D. C.
 The Doctor's Part, Dr. George Dock, Professor of Medicine, Washington University.
 The Hospital's Part, Mr. A. Waldheim, President, Jewish Hospital, St. Louis.
 The Citizen's Part, Mr. George D. Markham, Chairman, Charities' Committee, Chamber of Commerce.
 Discussion opened by Dr. J. L. Wiggins, East St. Louis.
 Health as an Asset, Dr. W. A. Evans, Chicago.
 Team Work for Success, Chas. B. Moulinier, S. J., President, Catholic Hospital Association, Milwaukee.
 Hospitals After the War, Dr. John G. Bowman.
 What to Do: A Summary, Dr. J. A. Hornsby.

A similar meeting was held in Memphis under the same auspices on February 22, and a third meeting was held in New Orleans on February 25. During March and April a score of meetings are to be held in the south. Conferences also are being arranged in the east and in the west.

The college is vigorously prosecuting its program of helpfulness to the hospitals in all parts of the country. There seems to be a universal awakening on the part of the hospitals and of the medical profession to the constructive plan of the college.

The college believes that the medical profession is responsible for the care of the sick, that it is the duty of the medical men to help their hospitals provide the facilities for such care according to the highest ideals of modern medical science, and that the hospital not only is a place in which to take care of the sick, but should be the health center of its community, a center which teaches the community how to keep well.

FIFTH ANNUAL CONVENTION OF OHIO HOSPITAL ASSOCIATION

Will Be Held in Cleveland Near the Last of May—Committees Already Appointed Will Represent Many Ohio Hospitals

The Fifth Annual Convention of the Ohio Hospital Association will be held at the Statler Hotel, Cleveland, on May 20, 21 and 22, 1919, and its committees have been appointed by President Warner.

The legislative committee, under Rev. A. G. Lohman of the German Deaconess Hospital, Cincinnati, as chairman, will consist of Miss Marie A. Lawson, City Hospital, Akron; Father M. F. Griffin, St. Elizabeth's Hospital, Youngstown; Mr. F. E. Chapman, Mount Sinai Hospital, Cleveland; Miss Mary Jamieson, Grant Hospital, Columbus. The committee on constitution and rules will be composed of Mr. C. B. Hildreth, St. Luke's Hospital, Cleveland, chairman; Sister Genevieve, St. Elizabeth's Hospital, Youngstown; and Dr. E. R. Crew, Miami Valley Hospital, Dayton. Father C. H. LeBlond, director of Catholic Charities, Cleveland, will be chairman of the committee on nomination; the other members will be Miss Daisy Kingston, Fremont, and Miss May Moore Russell, Jewish Hospital, Cincinnati. The committee on membership will consist of Rev. J. Diekman, Bethesda Hospital, Cincinnati, chairman; Sister A. M. Purcell, St. Vincent's Hospital, Toledo; and Miss Rose K. Steinmetz, Children's Hospital, Akron. Under Mr. P. W. Behrens, Toledo Hospital, Toledo, as chairman, the auditing committee will consist of Miss Nellie I. Templeton, City Hospital, Salem, and Mrs. C. L. Butterfield, Martins Ferry Hospital, Martins Ferry. A special committee to draft resolutions on the death of Mr. Bunn has been appointed to consist of Father M. F. Griffin, St. Elizabeth's Hospital, Columbia, chairman; Miss Alice Thatcher, Christ Hospital, Cincinnati; and Miss Florence Dakin, Middletown Hospital, Middletown. Mr. C. B. Hildreth, Mrs. Robert Crowell, and Mr. Guy J. Clark, all of Cleveland, have been appointed chairmen respectively of the three subcommittees for reception, entertainment, and purchasing and erection of booths.

Economy and Efficiency Should Back Each Other Up

Economy and efficiency are two important goals which hospitals try to keep before them in their management. Economy without efficiency in the care of the sick is hardly creditable. Efficiency without economy is indicative of ignorance and poor management.

FARMING AND GARDENING IN STATE INSTITUTIONS

Work Done by Inmate Labor and Supervised by Paid Employees Yields Bountiful Supply of Valuable Produce—Canning and Preserving the Surplus—Neat Financial Profit from Hog Fattening

BY FRANK DUMMER WHIPP, FISCAL SUPERVISOR, STATE DEPARTMENT OF PUBLIC WELFARE, SPRINGFIELD, ILL.

SINCE the consolidation of the one hundred state boards and commissions in Illinois into nine departments, and the state institution management into the Department of Public Welfare with a general office in the capitol building at Springfield, controlling the operation of twenty-three state penal and charitable institutions, it has been possible to arrange for an interchange of products among the various institutions, thus adapting the farms and gardens to the general needs of all.

The institutions include nine hospitals for the insane, one institution for feeble-minded, one for epileptics, two for the blind, two training schools, one for boys and one for girls, three soldiers' institutions, two penitentiaries, one reformatory, one school for the deaf, and one eye and ear infirmary.

Many of the institutions with large farms and gardens have been able to produce more than they consume of certain products, and these have been transferred to the other institutions needing them.

Illinois owns 11,000 acres of land with approximately 9,000 acres available for planting farm and garden produce. The largest farm is 2,200 acres at Joliet. There are four other large farms consisting of 1,000 acres each, one at St. Charles, one at Kankakee, one at Dixon, and one at Alton. The remainder of the farms range in size from 20 acres to 600 acres.

Nowhere is there a greater need for a generous supply of vegetables and produce than in our institutions. Much of this produce has great dietetic value, keeping the inmates in a healthful physical condition, and largely decreasing bills for medicine. The population to be fed every day consists of about 31,000 people. Of this number 17,000 are insane, 4,000 are in the penal institutions, and the balance are in the other institutions.

The farm and garden work is done by inmate labor, supervised by paid employees. The farms are inspected regularly by an official from the department of public welfare, the farm, garden and dairy consultant. This official consults with the different farmers and gardeners, keeps in touch with all of the institutions, and provides for the interchange of articles between them.

Last year the Department of Public Welfare made a strenuous effort to increase the yield of these farms and gardens, and, as a result, the total yield was over \$780,000 for the year, which record was far better than any other year in the history of the state. Early last spring, instructions were given to institution officials not to let any of the produce go to waste but to can and preserve all of it, and the idea met with most hearty cooperation. The canned vegetables, according to estimated prices at the present time, amount in value to \$70,000, while the fruit preserved is worth \$5,000. The largest quantity of vegetables prepared was approximately 700 barrels of liberty cabbage. If these barrels were placed lengthwise in a row they would reach a distance of almost one-half mile. Some of the other larger quantities of vegetables were: tomatoes, 38,464 gallons; cucumber pickles, 12,294 gallons; corn, 3,252 gallons; green beans, 6,080 gallons; rhubarb, 3,125 gallons; and mixed pickles, 6,155 gallons. The larger quantities of fruits preserved were: cherries, 1,389 gallons; grapes, 494 gallons; blackberries, 736 gallons; and grape jelly, 549 gallons.

One of the most profitable departments of an institution is that which supervises the fattening of hogs. The hogs are fed almost exclusively waste from the dining rooms and kitchens, and are fattened almost entirely without the use of grain. They have provided tons of pork for institution consumption. Where there is a shortage of feed at one institution, hogs are transferred to other places where there is a more abundant supply.

Three herds of dairy cattle have been established at new institutions without the purchase of a single animal, by transferring surplus cattle from other institutions. There was considerable transferring done last year. At least \$10,000 worth of stock feed was transferred from the Illinois State Penitentiary farm at Joliet to the other institutions, and there was a constant exchange of various kinds of other produce between all the plants.

Aside from the financial record that has been made by these farms and gardens, it has been found that the healthful outdoor work has been most beneficial to the inmates.

CHILDREN'S PAVILION AT SHARON SANATORIUM

**Department for Children in Connection with Woman's Sanatorium for Tuberculosis—
Every Provision for Fresh Air—Monitor System Used—
Healthful Living Paramount**

BY WALTER A. GRIFFIN, M. D., SUPERINTENDENT SHARON SANITORIUM, SHARON, MASS.

THE Sharon Sanatorium at Sharon, Mass., which for a period of more than twenty-five years has treated women of limited means for pulmonary tuberculosis, is now about to institute a new department for the treatment of children. The



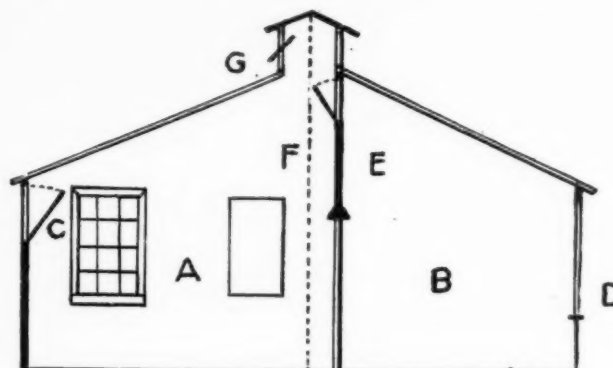
Fig. 1. Building of the children's department of Sharon Sanatorium at Sharon, Mass.

need of such a department is evident; many children are now placed in open-air schools so that they may have the maximum of hygiene while the necessary studies are going on, and there are thousands of children of tuberculous parentage, or with glands in the neck, or possibly some bone lesion, and many others, who are run down, anemic, and with a poor start in life, who would be greatly benefited by some months or a year or so of treatment in an institution where the question of hygienic living is paramount. It is to fill such a need that the new work is to be undertaken at Sharon.

The new building is back of the main sanatorium and is far enough away so that there will be no disturbance to the older patients because of the noises which might be expected in a children's sanatorium. It is, however, placed near enough for easy administration.

The building, a picture of which is shown, is made of reinforced concrete, and the Van Gilder system of construction is used. By this system the outside walls are double, each wall being 4 inches thick, and there is a 2-inch air space all about the building. The walls are erected with a

special machine which allows the forms to be moved as quickly as the cement is tamped in. Frequently, on straight work, they are moved at the end of six minutes from the time the first cement is put in. The longest form will lay up a double wall 5 feet long and 9 feet high, and since unskilled workmen can be used for the most part, the cost is hardly more than would be necessary with the best frame construction, especially if there is a good quality of gravel near at hand. A good gravel bank does exist at Sharon, and the gravel did not need to be screened but could be brought directly from the bank and put through the concrete mixer. Naturally, such a building is perfectly fireproof on the outside, and, in the case of the pavilion at Sharon, it was made nearly fireproof on the inside by constructing all partitions of the basement and the first floor of cement, and the first floor itself is a reinforced concrete slab.



SCALE = 10 FT.

Fig. 2. Side elevation of ward and sleeping porch of children's department of Sharon Sanatorium, showing ventilating system. The height from the floor to the top of the monitor is 15 feet.

- | | |
|---------------------------------|-------------------------|
| A Ward, 13 feet wide. | E Partition. |
| B Sleeping porch, 10 feet wide. | F Sash. |
| C Sash, 8 inches deep. | G Sash, 12 inches deep. |
| D Screen. | |

Above the first floor the construction is wire lath on wood. The roof is sparkproof paper shingles.

The building is arranged with the central administration portion, consisting of nurse's room, office, diet kitchen, and dressing rooms on the first floor, and a large assembly room on the second floor and rooms for assistants and help. One small room is also set aside as an operating room. From the central portion of the building jut two wings, one on each side. These will be the wards, each

to contain ten patients, one for boys and one for girls.

Particular attention has been given to ventilation in the wards, a modification of the monitor system being used. By this system, as Dr. John Fish of the Massachusetts Hospital School has proved, foul air and smoke can be most quickly eliminated from a room. The only thing that is necessary is a small aperture for exit at the top, a small opening at the bottom for fresh air to enter, and a low degree of heat. With such a system of ventilation, foul odors are quickly carried off and, in fact, never are in evidence. Foul dressings may be done at one end of such a ward and no odor of it reaches the farther end.

Each ward is divided by doors hung on a track through the center so that the portion on one side of these doors may be used as a warm dressing place in winter weather and the other portion as a sleeping balcony. The monitors are in the roof of the ward proper, but that no dead air may remain in the ceiling of the sleeping porch, windows are arranged to allow any dead air to escape into the ward and so into the monitor. The arrangement can be easily understood by the drawing. In the summer time the doors which separate the ward into two parts may be taken from the track and stored away. A very simple device makes it possible to open the monitors from the floor by pulling on cords, three windows being closed or opened at one time. These windows of the monitor are pivoted in the center, so that a perfectly weatherproof connection is made when the windows are closed, and since half of these windows are on the south side of the monitor and half on the north side, it would be a very wild

storm indeed which did not allow of some aperture in the monitor being opened. In addition to the monitor there will be a clear sweep of air on the sleeping porch side, where there is no obstruction from the railing to the eave line, and in the ward portion where there are arranged windows 5 feet above the floor, hinged at the bottom, so that they may be dropped open at the top and allow for ventilation without direct draft.

A dressing room is placed in the main portion of the building for each ward. In this dressing room are toilets, wash bowls, and a locker for each patient. These lockers are 18 by 20 inches and each one has in the lower part a liberal-sized drawer. They are so arranged that the cover for the drawer extends out a bit from the locker and thus makes a shallow step on which the patients may sit, if necessary, or upon which they may stand to reach things inside the locker.

The floor of this room and of the ward is of plastic linoleum and is the most disappointing part of the whole structure since it has shown a tendency to pit badly with the rubber wheels of the beds. It was hoped, when it was decided to use this material, that the floor would be warmer than cement, less noisy, and as impervious to dirt and moisture; it would be perfectly satisfactory were it not for the pitting mentioned above.

Connected with each ward is a small room which has a separate veranda, quite isolated from the rest of the building. These rooms will be called "emergency rooms" and here any patient who is more than usually sick or who may be suffering from some intercurrent acute infection may be kept. It is intended for one bed, but if necessary, probably two patients could be accommodated.

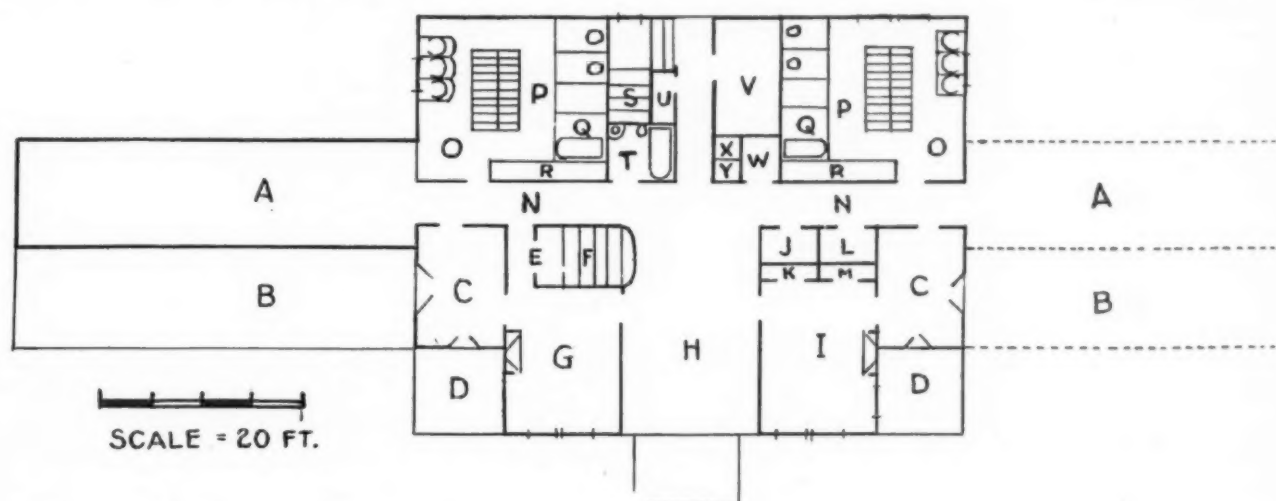


Fig. 3. Floor plan of building for the children's department of the Sharon Sanatorium.

- | | | | |
|----------------------|-----------------|---------------------|-----------------|
| A Ward. | H Hall. | O Dressing rooms. | V Diet kitchen. |
| B Veranda. | I Office. | P Lockers. | W Toilet. |
| C Emergency room. | J Linen room. | Q Bathrooms. | X Ice. |
| D Emergency veranda. | K Closet. | R Vents. | Y Chute. |
| E Closet. | L Kitchen room. | S Stairway. | |
| F Stairway. | M Closet. | T Nurses' Bathroom. | |
| G Nurse's room. | N Corridor. | U Service closet. | |

The assembly room on the second floor of the building will be used at first as a schoolroom, and, while it has no definite monitor, an endeavor was made to carry out the monitor idea by extending the ceiling to the rafters, thus bringing three of the windows which would otherwise be in the attic close up to the ceiling of this room. These windows, when open, will obviate any possibility of stagnant air.

The building was constructed from funds sub-

scribed by various individuals, and such funds have now been largely exhausted so that little is left for maintenance. It is hoped that other friends of the sanatorium may help out on this side of the work. The price of board will be ten dollars per week and will also include the services of a teacher. Naturally, with such a price, there will always be a deficit, since in these days of high prices it will cost at least twenty or twenty-five dollars per patient.

THE MEANING OF CASE RECORDS

Case Records Are a Responsibility Which the Hospital Owes to Its Directors, Patients, Interns, and Nurses as Well as to the Medical Profession at Large— Should Be Made Important Part of Hospital Discipline

By J. M. BALDY, M. D., PRESIDENT BUREAU OF MEDICAL EDUCATION AND LICENSURE, PHILADELPHIA

THE lack of knowledge of the meaning of case records is probably one of the factors which makes it so difficult to enlist the active and practical interest of doctors in this part of hospital work. Although often fully aware of the importance of business records, superintendents are so frequently indifferent to case records as to elicit wonder and throw themselves open to the opinion that their lack of interest rests upon their inclination to follow the line of least resistance; consequently they make themselves liable to misinterpretation regarding their judgment in their other duties. Boards of managers are so negligent of many of the ramifications of their administrative duties that they notoriously rely upon their superintendent's and staff's judgment of their own fulfillment of their several duties. They quiet their conscience for neglect of such details by assuming that the "king can do no wrong," and that therefore the case records are properly kept; or else they take it for granted that, since they are not properly attended to, the importance of the subject must be so small as to be negligible. The consequence of all this is a series of case records in hospitals which on the whole are sublimely ridiculous and which entail on the hospital budget an utterly useless expenditure of funds. Why continue to waste money on the paper and ink? It is incomprehensible how any successful business man who knows perfectly well that his business would probably have resulted in chaos if his books had not been accurately kept, can fail to recognize that there must be an enormous loss to the business of the hospital without similar care. His plea has been that in the *business end* of the hospital the books have been properly and carefully attended to. But what kind of a business man must he be who accurately conducts one de-

partment of his affairs and deliberately turns his back on all the other departments? Surely every manager must realize that there is a scientific side to the hospital business; and if he desires to run a hotel only, why not cease meddling with a complex business and run a hotel purely and simply? The hotel department is only one part of the hospital. Since it seems that hospital managers must be instructed in this matter, let me set them right once for all.

On the scientific side of the hospital there should be a record department headed by an individual whose duties consist in properly filing and preserving the case records; whose powers are extended enough for him or her to be able to refuse to file any record whatever until it has been fully completed as required by the rules of the hospital, notwithstanding the wishes or opinion of any member of the staff to the contrary. This is a matter in which staff members will have to be severely disciplined before competent results can be obtained, and this discipline should extend to the retirement of all recalcitrant individuals. The ordinary plea made for neglect is that the doctor is a busy man and has no time to spare; even superintendents so excuse their staffs. There is only one possible answer to this; if the doctor is too busy to attend properly to the duties he has sought and assumed, he has no moral right to continue on the staff. If the cook stated that she was too busy to prepare the essential parts of the dinner because she had outside affairs of her own, she would shortly be separated from her job. So should the doctor. There has been no greater obstruction to hospital improvement than the doctors of a certain class who have sought and retained positions on the staff of two or more institutions and have not only neglected

to attend to the work properly but have kept other and better men out of the opportunity.

Case records are educational—educational to the intern, to the nurses, as well as to the attending chief. Further, they are educational to the board of managers as well as to their agent, the superintendent. They are a protection to the institution against suits for damages. They are an assurance to the patient of proper treatment. They are an assurance to the public who contribute to the support of the hospital that their money is being properly and helpfully expended. Case records not only demonstrate whether or not the physician is giving proper attention to thoroughgoing and exhaustive diagnosis but actually secure this most desirable result by creating the consciousness of an open record which is regularly checked up. Last but not least they are most helpful, through potential research, in the advancement of medical knowledge and therefore useful to the whole world. What a wealth of usefulness has been lost by the neglect of the despised case records!

In these days of hospital standardization and incidental intern education, it may be fairly estimated that such a positive value to both the intern (from the viewpoint of the value of the hospital service to his education) as well as to the hospital, is to be found in the proper taking of case records that every care should be given to making them complete. Or a system should be developed by which records from all the several departments of the institution, including the laboratories (both pathological and x-ray) shall come automatically to the record department in order that the responsible head may daily ascertain whether or not the individuals throughout the institution who are responsible for making up these records are consistently attending to their duties. Means of identification between the various departments of the hospital doing work on the patient is most important and is in itself an assurance that the interested inspector of the record is surely placed in touch with all the facts—facts which may be most essential and which might otherwise be overlooked.

No patient should be discharged from the institution without his or her records having been checked up in the record department and any deficiencies in this respect promptly rectified. The system should be so developed that it shall not be possible for any single department in the hospital to neglect this most important part of its functions without the neglect being promptly noted. It should be made comprehensive enough by cross-indexing to enable one to proceed with equal ease from the record room (in the case of any individ-

ual patient) to the specimens, slides, and records kept in the pathological laboratory, and to the plates and records kept in the x-ray laboratory, as well as to start from the laboratory records in these laboratories and to proceed promptly to the proper records in the record room.

The efficient keeping of records of the cases admitted to the house service is basically essential to the education of the intern. It is not out of the way to estimate that 30 percent of the benefit derived by the intern from his education in the internship is involved in the record-keeping, and the proper conduct of this function should be remorselessly insisted upon. No service of the intern can be considered competent which does not take into consideration history-writing. It is only by the intern's actually noting on the history sheet the history of the patient, the physical findings, and the diagnosis reached that the chief can obtain a competent idea, first, of the basic knowledge with which the intern started, then of the progress he may be making, and consequently the degree to which he may be trusted. On the admission of a patient to the wards of the hospital it becomes the primary duty of the intern promptly to see the patient, to take the history as well as the physical findings, and to note them carefully upon the proper sheets. No excuse should be accepted for failure to perform this function, and the intern who neglects it should be promptly disciplined.

The notes thus taken should be available at the bedside when the visiting physician makes his first visit. In making his examination the visiting physician should have in hand the findings of the intern, and note the result first of all; during his investigation he should compare and check up the intern's findings with his own, calling the attention of the intern to the discrepancies, and having him re-examine for certain points where necessary. The future conduct of the case, operative or medical, should consist in the discussion with the intern of the benefits of the treatment primarily applied, of the necessities for any change, and the results looked for by such changes—all this in view of the actual notes as to the progress of the case made by the nursing and intern departments. As a routine, if the history is not prepared by the intern and ready for his chief, it should be the duty of the chief to decline to examine the patient (excepting in an emergency) and demand of the superintendent that the intern drop anything with which he may be engaged and proceed promptly to the taking of the history. In the institution where it is understood that such action will result, this type of neglect will rarely occur. In no other way can the

staff member obtain competent control of the intern's service.

The history sheet of the intern should contain the O. K. of the visiting physician, and the fact that it is missing should be sufficient evidence to the record department that the staff member himself is not performing his proper duties either to the patient or the intern. After the physician's attention has been called to the matter (if the offense be frequently repeated) the fact should be promptly transmitted to the superintendent and through him to the board of directors for their information and proper action. Any hospital board which does not secure such service from its staff members fails administratively; what is asked, therefore, can not be regarded as a hardship—unless it be a hardship for the board of managers and superintendent to be called upon to give intelligent thought to the responsibilities which they have not only voluntarily assumed but in most cases have sought. The intelligent conduct of the history work on the part of both the intern and the staff is an index to the competency of the work being performed on the patients.

The compulsion thus routinely enforced upon staff doctors of studying their cases carefully and openly, practically in competition with their interns, and placing themselves on public record is of the highest educational value to themselves as well as to their nurses, students, and interns. The extra time taken is negligible in these days of stenographers and dictaphones. A simple and expeditious method, as well as one within the financial possibilities of most hospitals, is for the superintendent to have available to accompany the attending physician on his rounds a stenographer whose duty it shall be to record the dictation of the doctor. This insures the doctor's attention to his obligations, and the well-known excuse of "not having time."

Large and cumbersome systems of records are by no means essential, and there is very readily available a minimum basic record system which is easily possible in any hospital, however small. Such a system has been adopted for the Pennsylvania hospitals and may very easily be expanded to any extent desired by the larger institutions. The essentials of any such system consist in the record room of admission card, history sheet, temperature chart, order sheet, nurses' record sheet, operating room sheet, x-ray-finding sheet, laboratory-finding sheet, diagnosis card, and end result card; in the x-ray laboratory, of record cards and plates; in pathological and clinical laboratory, of record cards, slides, and paraffin blocks. These should all be properly filed in their respective departments, cross-indexed, and preserved perma-

nently in easily accessible places.

There are probably very few hospitals whose staffs do not include a number of doctors superannuated or originally incompetent; men who hold their positions merely for the prestige it brings them and men who avowedly neglect their plain duty to the hospital and to the community. How many boards of directors keep themselves informed in regard to these matters and are in a position to judge of the service rendered? In the past, as a matter of fact, few directors were in a position to know the facts no matter how earnestly they worked to become familiar with them. With properly kept case records, there should no longer be any excuse for this ignorance. The necessity of asking information from unwilling staff colleagues or from prejudiced and interested superintendents ceases. A quiet resort to the record room and a comparison of the records of the various staff members from the scientific departments alone will quickly furnish the desired knowledge; better still, a comparative report presented at each monthly or quarterly meeting of the board as to the comparative activities of the various staff members in their several departments would, when known by the staff, in itself stimulate them to a proper realization of their duties without inviting the necessity of any direct compulsion, at least in the first instance. If only part of the staff saw the proper light, the others would be placed in a position which would insure either their cooperation or their ultimate retirement. If no other result whatever accrued to the board of managers, this alone would amply justify the demand that the staff make good or retire. But other and equally important results follow. It is not only imperative that the board of managers have accurate knowledge as to whether or not its staff is attending to its proper duties; it behooves them also to have firsthand knowledge whether or not the results produced by the several members of the staff are up to the standard and if not, why not. The case records are the only possible accurate source of information on this point.

The medicolegal importance of case records is self-evident. The importance is so great in its relation to property and human freedom their proper keeping should be made legally compulsory.

Medical science has advanced enormously in recent years, but who of us who know the real truth and have had an opportunity to see behind the scenes, can but regret the lost opportunities and wasted material which would have advanced the world many degrees further in knowledge and ability to control disease if it had only been available?

HOSPITAL ACCOUNTING

General Ledger of Average Endowed Hospital With Funds Invested in Real and Personal Property Described—The More Important Accounts Worked Out in Full—Income Ledger and Endowed Bed Ledger Explained

BY CHARLES A. PORTER AND HERBERT K. CARTER OF THE STAFF OF THE MODERN HOSPITAL

[Continued from February issue, p. 111]

GENERAL LEDGER

It will probably be unnecessary to make any changes in the General Ledger accounts of the average endowed hospital whose funds are invested in real and personal property of various kinds. The usual General Ledger accounts are as follows:

- | | |
|---|---|
| 1. Cash. | 15. General material. |
| 2. Hospital land and buildings. | 16. Supplies. |
| 3. Equipment. | 17. Loans and notes payable. |
| 4. Machinery and tools. | 18. Hospital earnings. |
| 5. Furniture and fixtures. | 19. Donations restricted. |
| 6. Apparatus and instruments. | 20. Legacies restricted. |
| 7. Treasurer's account with superintendent. | 21. Income from General Endowment Fund. |
| 8. Accounts receivable. | 22. Income from Endowed Bed Fund. |
| 9. Stocks. | 23. Income from special funds. |
| 10. Bonds. | 24. Prepaid insurance. |
| 11. Mortgages receivable. | 25. Accrued and prepaid taxes. |
| 12. Surplus and deficit. | 26. Capital account. |
| 13. Accounts payable. | 27. Reserve for depreciation. |
| 14. Mortgages payable. | |

It is understood that individual accounts will have to be kept with each creditor and debtor, with each kind of stock, bonds, and piece of real property, and that the Income Ledger and loans and notes payable are not a part of the General Ledger, but are merely descriptive books used for convenience, which it is not necessary for small and private hospitals to keep.

Examples of the more important accounts to be found in the average General Ledger are shown below. No cash account is kept in this book, because the cash book makes it unnecessary.

1

HOSPITAL LAND AND BUILDINGS

HOSPITAL LAND AND BUILDINGS			
DR.		CR.	
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Capital account.....	\$.....	Cash.....	\$.....
For expenditures as shown by Voucher Register and reported by Superintendent as per Journal entry.		For receipts on account of sales as per Cash Book.	
Capital account.....	\$.....	Depreciation reserve.....	\$.....
For value of buildings donated to hospital and capitalized as per Journal entry 7.		For depreciation charged off for the month as per Journal entry 20.	
Surplus and deficit.....	\$.....	Capital account.....	\$.....
For profit on sale of property as per Journal entry 8.		For loss by fire charged as a reduction of capital as per Journal entry 9.	
		Surplus and deficit.....	\$.....
		For loss on sale of property as per Journal entry 9.	
Total.....	\$.....	Total.....	\$.....

The difference in the totals equals the value of hospital land and buildings as shown on the balance sheet.

The Ledger accounts with equipment, machinery and tools, apparatus and instruments, etc., should be handled in the same manner.

2

TREASURER'S ACCOUNT WITH THE SUPERINTENDENT

DR.			CR.
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Hospital earnings.....	\$.....	Surplus and deficit.....	\$.....
As per Journal entry 14. These include re-		Current expenditures as reported by the	
ceipts of dispensary, emergency ward, and		Superintendent, as per Journal entry 16.	
miscellaneous items.		Capital expenditures.....	\$.....
Cash.....	\$.....	As reported by Superintendent, as per Jour-	
For remittances to the Superintendent as		nal entry 16.	
per Cash Book.		Surplus and deficit.....	\$.....
Surplus and deficit.....	\$.....	For Superintendent's account receivable,	
For surplus material on hand as shown by		charged off during the month as per Journal	
the Superintendent's report as per Journal		entry 16.	
entry 15.		Surplus and deficit.....	\$.....
		Loss and depreciation of material as per	
		Journal entry 16.	
		Cash.....	\$.....
		For remittances by Superintendent to the	
		treasurer as per treasurer's Cash Book.	
Total.....	\$.....	Total.....	\$.....

The difference in the totals equals the balance of the Treasurer's account with the Superintendent.

3

HOSPITAL EARNINGS ACCOUNT

DR.			CR.
Total of period to date.....	\$.....	Total of period to date.....	\$.....
Surplus and deficit.....	\$.....	Treasurer's account with Superintendent	
For amount transferred as per Journal entry		as shown by Superintendent's report per	
17.		Journal entry 14.	
Total.....	\$.....	Total.....	\$.....

Account will balance monthly.

4

ACCOUNTS RECEIVABLE

DR.			CR.
Total of period.....	\$.....	Total of period.....	\$.....
Amounts due and unpaid as per Journal en-		Cash.....	\$.....
try 18.		As per Cash Book, surplus and deficit,	
		Journal entry 12, for uncollectable accounts	
		receivable charged off during the month.	
Total.....	\$.....	Total.....	\$.....

5

STOCKS

DR.			CR.
Total of period to date.....	\$.....	Total of period to date.....	\$.....
Cash.....	\$.....	Cash.....	\$.....
Stocks purchased during the month, not		Stocks sold during month entered from Cash	
including accrued interest as per Cash Book.		Book.....	\$.....
Donations restricted.....	\$.....	Surplus and deficit.....	\$.....
Value of stocks donated, not including ac-		Loss or depreciation charged off during month	
crued interest, as per Journal entry 3.		as per Journal entry 11.	
Donations, unrestricted.....	\$.....		
Value of stocks donated, not including			
interest, as per Journal entry 1.			
Surplus and deficit.....	\$.....		
Profit on stocks sold during month as per			
Journal entry 10.			
Total.....	\$.....	Total.....	\$.....

The bonds account and mortgage receivable account should be handled in about this same manner.

6

INTEREST PURCHASED ACCOUNT

DR.			CR.
Total of period.....	\$.....	Total of period.....	\$.....
Cash.....	\$.....	Cash.....	\$.....
Accrued interest purchased during month with stocks, bonds, and mortgages as per Cash Book.		Collections as per Cash Book.	
Total.....	\$.....	Total.....	\$.....

7

PREPAID INSURANCE

DR.			CR.
Total of period.....	\$.....	Total of period.....	\$.....
Cash.....	\$.....	Superintendent's account with Treasurer....	\$.....
As per Treasurer's Cash Book.		For insurance charged to current expense previously paid as per Treasurer's Cash Book.	
Total.....	\$.....	Total.....	\$.....

The difference of the totals equals prepaid insurance.

8

CAPITAL ACCOUNT (HOSPITAL PROPERTY AND EQUIPMENT)

DR.			CR.
Land and buildings.....	\$.....	Total of previous months.....	\$.....
Equipment.....	\$.....	Land and buildings.....	\$.....
Machinery and tools.....	\$.....	Equipment.....	\$.....
Furniture and fixtures.....	\$.....	Machinery and tools.....	\$.....
Apparatus and instruments.....	\$.....	Furniture and fixtures.....	\$.....
For book value of sales as per Journal entry 19.		Apparatus and instruments.....	\$.....
Land and buildings.....	\$.....	For capital expenditures as per Voucher Register and Journal entry 6.	
Equipment.....	\$.....	Land and buildings.....	\$.....
Machinery and tools.....	\$.....	Equipment.....	\$.....
Furniture and fixtures.....	\$.....	Machinery and tools.....	\$.....
Apparatus and instruments.....	\$.....	Furniture and fixtures.....	\$.....
For loss by fire as per Journal entry 9.		Apparatus and instruments.....	\$.....
Total.....	\$.....	For value of gifts capitalized as per Journal entry 7.	
		Total.....	\$.....

The difference in the totals of this account equals the capital.

This account equals the book of hospital property and equipment. It is not a part of the surplus and deficit account, and cannot be so considered. Surplus consists only of money or its equivalent that can be used to carry on the business.

9

ENDOWED BED FUND

DR.			CR.
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Surplus and deficit.....	\$.....	Donations.....	\$.....
Amount charged off during the month owing to cessation of liability of hospital as per Journal entry 4.		For donations to this fund as per Journal entry 3.	
Total.....	\$.....	Donations as per Treasurer's Cash Book....	\$.....
		Partly Endowed Bed Fund.....	\$.....
		Endowments completed and transfer made as per Journal entry 5.	
		Total.....	\$.....

Balance of account equals Endowed Bed Fund.

10

PARTLY ENDOWED BED FUND

DR.			CR.
Total to date.....	\$.....	Total to date.....	\$.....
Endowed Bed Fund.....	\$.....	Cash, as per Cash Book.....	\$.....
Amounts transferred as per Journal entry 5.			
Surplus and deficit.....	\$.....		
Amount charged off owing to cessation of liability as per Journal entry 4.			
Total.....	\$.....	Total.....	\$.....

Balance of account equals Partly Endowed Bed Fund.

This account is used for the endowment of beds by installments, and on completion of these are transferred to the Endowed Bed Account. Donations to this fund may be invested and the income used as a part of the General Endowment Fund until the time of transfer, when the income will be shown under the income from investments held in Endowed Bed Fund.

11

GENERAL ENDOWMENT FUND

DR.			CR.
Total to date.....	\$.....	Total to date.....	\$.....
Surplus and deficit.....	\$.....	Cash.....	\$.....
Amount transferred to this account owing to cessation of liability as per Journal entry 4.		As per Treasurer's Cash Book.	
		Mortgages receivable.....	\$.....
		Stocks.....	\$.....
		Bonds.....	\$.....
		Or other investment securities as per Journal entry 3.	
Total.....	\$.....	Total.....	\$.....

Difference in totals equals General Endowment Fund.

12

SPECIAL FUND (ANY)

DR.			CR.
Total to date.....	\$.....	Total to date.....	\$.....
Surplus and deficit.....	\$.....	Cash.....	\$.....
Appropriations to meet expenses chargeable to this fund as per Superintendent's report, as per Journal entry 17.		Income from investments held in this fund as per Cash Book.	
		Mortgages.....	\$.....
		Stocks.....	\$.....
		Bonds or other investments given to this fund during the month as per Journal entry 4.	
Total.....	\$.....	Total.....	\$.....

Balance equals amount of the special fund.

The General Ledger accounts with all Funds show only their extent. Increases and decreases, except where the income is added to the principal, are charged to surplus and deficit.

In the Income Ledger should appear an account with each fund and an account with each individual security of each fund. The total of the income is then posted to the fund income account, together with taxes or other current expenses which decreased the income of this fund. The balance of the account is then transferred by Journal entry No. 17 to the surplus and Deficit Account.

13

LOAN AND NOTES PAYABLE

DR.			CR.
Total to date.....	\$.....	Total to date.....	\$.....
Cash.....	\$.....	Cash.....	\$.....
Loans paid as per Cash Book.		Loans accrued as per Cash Book.	
Loans and Notes payable.....	\$.....	Loans and notes payable.....	\$.....
Renewals as per Journal entry 13.		Renewals as per Journal entry 13.	
Total.....	\$.....	Total.....	\$.....

Balance of account equals loans and notes payable. Mortgages payable may be treated in this manner.

14

SURPLUS AND DEFICIT ACCOUNT

DR.			CR.
Totals.....	\$.....		Tota's..... \$.....
Superintendent's account with Treasurer.....	\$.....		Income..... \$.....
Current expense as per Journal entry 16.			Current revenue..... \$.....
Superintendent's account with Treasurer....	\$.....		For month as per Journal entry 17.
Capital expenditures as per Journal entry 16..	\$.....		Bonds..... \$.....
Superintendent's accounts receivable, as per			Stocks..... \$.....
Journal entry 16.....	\$.....		Other investments..... \$.....
Uncollectable accounts receivable charged off			Profit on sale of such investments..... \$.....
during month.....	\$.....		As per Journal entry 10.
As per Journal entry 16.			Hospital properties..... \$.....
Accounts receivable.....	\$.....		Profit on sales of above as per Journal entry
Treasurer's accounts receivable.....	\$.....		8.
Charged off as uncollectable during month			Endowed Bed Fund.
as per Journal entry 12.			General Endowment Fund..... \$.....
Material.....	\$.....		Special Funds..... \$.....
Loss or depreciation.			Amount charged off during month owing to
Surplus and deficit.....	\$.....		cessation of liability of hospital account
Loss or depreciation.....	\$.....		with Superintendent..... \$.....
Charged off investment accounts as per			Surplus by inventory..... \$.....
Journal entry 11.			As per Journal entry 15.
			Cash as per Cash Book for damages by fire,
			etc..... \$.....
			Funds..... \$.....
			Amount charged off owing to cessation of
			liability as per Journal entry 4.
Total.....	\$.....		Total..... \$.....

Balance equals surplus or deficit. This account shows the standing of the hospital in regard to working capital. A deficit means that the management must work to the end that the reserve funds will not be attacked. A surplus will show the amount of working capital which the hospital has on hand.

The Ledger accounts, as a whole, should be balanced at the end of each fiscal year and the balances carried forward. These balances must agree with the Balance Sheet.

Accounts should also be ruled off when at any time they happen to balance during the year, to save additions.

15

MORTGAGES RECEIVABLE

DR.			CR.
Total of previous months.....	\$.....		Total of previous months..... \$.....
Mortgages receivable.....	\$.....		Mortgages receivable..... \$.....
For renewals as per Journal entry 20.			For renewals as per Journal entry 20.
Donations and legacies.....	\$.....		Surplus and deficit..... \$.....
For value of same, not including accrued			For loss or depreciations charged off as per
interest given to the hospital during the			Journal entry 11.
month, as per Journal entry 1.			Cash..... \$.....
Capital account.....	\$.....		For money received in payment of mort-
Investment account concerned.....	\$.....		gages as per Treasurer's Cash Book.
For value of same given in part or full pay-			
ment for property sold as per Journal			
entry 2.			
Endowment funds.....	\$.....		
Special funds.....	\$.....		
For value of mortgages donated to these			
funds during the months as per Journal			
entry 3.			
Total.....	\$.....		Total..... \$.....

The difference in the totals equals mortgages receivable.

16

DONATIONS AND LEGACIES UNRESTRICTED

DR.			CR.
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Surplus and deficit.....	\$.....	Cash.....	\$.....
Amount of unrestricted donations transferred as per Journal entry 17.		Amount of donations as per Cash Book.	
		Mortgages receivable.....	\$.....
		Bonds.....	\$.....
		Stocks.....	\$.....
		Other investments.....	\$.....
		For amounts of these donated to hospital as per Journal entry 1.	
Total.....	\$.....	Total.....	\$.....

This account should be balanced monthly.

17

INCOME

Income From Investments Held in General Endowment Fund

DR.			CR.
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Taxes.....	\$.....	Cash.....	\$.....
Or other than petty current expenses charged against income from these investments as per Treasurer's Cash Book.		For receipts on account of investments held in this fund as per Treasurer's Cash Book.	
Surplus and deficit.....	\$.....	Accounts receivable.....	\$.....
Net income from these investments transferred to surplus and deficit account as per Journal entry 17.		Income due and unpaid on investments held in this fund as per Journal entry 18.	
Total.....	\$.....	Total.....	\$.....

This account will balance monthly.

18

DEPRECIATION RESERVE

Buildings

DR.			CR.
Total of previous months.....	\$.....	Total of previous months.....	\$.....
Buildings.....	\$.....	Surplus and deficit account.....	\$.....
For depreciation on such as per Journal entry 10.		For cost of repairs as shown by voucher register and Journal entry 16.	
Total.....	\$.....	Total.....	\$.....

The difference in the totals of this account equals the reserve for depreciation on buildings. Other depreciation accounts are handled in this same manner.

A surplus and deficit statement (Form 26) is shown and also a form of the Treasurer's Trial Balance and Balance Sheet. It is the best practice to make a full statement of all operating accounts each month.

Before explaining the Trial Balance, the Income Ledger and Endowed Bed Ledger will be described.

INCOME LEDGER AND ENDOWED BED LEDGERS

Two subsidiary books of the General Ledger are kept—namely, the Income Ledger books and Endowed Bed Ledger, the first of which is only

a record and not a part of the General Ledger, while the latter closes into its proper account in the General Ledger.

ENDOWED BED LEDGER

The Treasurer should have a separate ledger for Endowed Beds, and various accounts in this book headed by the person or persons, or organization, endowing a bed.

Example No. 1 for full endowment, example No. 2 for partial endowment, and example No. 3 for transfers to the general fund are shown below:

ENDOWED BEDS

Endowed by.....	No.....
Duration.....	Name.....
Nominator.....	Address.....
Successor.....	Address.....
Remarks.....	

Dr.

Cr.

Amount	Folio	Item	Folio	Amount
\$.....		Cash.....		\$.....
		As per Cash Book.		
.....		Partly Endowed Bed Fund, Journal entry 5.....	
.....		Surplus and Deficit.....	
		Charged off owing to cessation of liability of hospital as per Journal entry 14.		
\$.....				\$.....

If this last entry is made, the account will balance and is closed. If not, the difference in the totals equals the amount of the account.

[To be continued]

PROVISION FOR INSANE IN NEW JERSEY STATE INSTITUTIONS

Special Committee of Hospital Superintendents Submits Comprehensive Program to Board of Charities and Corrections—Dangers of Congestion Pointed Out

A special committee of prominent New Jersey, Pennsylvania, and New York hospital superintendents recently made a thorough inspection of the Trenton State Hospital for the purpose of ascertaining to what extent the hospital is equipped for the care and treatment of the increasing insane population in the two New Jersey state institutions at Trenton and Morris Plains. The committee was accompanied by Dr. Henry A. Cotton, superintendent of the Trenton Hospital, who pointed out the lack of present facilities for the care of the rapidly increasing number of patients.

Immediately following the inspection a meeting was held in the hospital, at which the positive dangers resulting from congestion were pointed out. The committee then decided on the presentation to the State Board of Charities and Corrections of the following comprehensive program for the care of insane in both institutions in the order of urgency to afford proper relief. This program provides for:

1. Adequate hospital facilities for the care and treatment of the acute, curable cases.
2. Farm, colony, and industrial facilities for the quiet, able-bodied type of patient who is capable of doing productive work, inside or outside the institution.
3. Construction of a psychopathic hospital to serve as a central research and treatment laboratory, to be erected in a large city readily accessible to those parts of the state most densely populated.

In the case of the last-named recommendation, it was suggested that the psychopathic hospital be patterned partly after the New York State Psychiatric Institute on Ward's Island and the Boston Psychopathic Hospital, which are not only centers of research for the various state institutions, but also centers of training for the medical and surgical staffs of the state and county hospitals and are available to the medical profession generally for the treatment of private patients, thus saving their respective states thousands of dollars annually.

The question of providing adequate care and treatment for the insane is especially important at this time, inasmuch as the demobilization of troops brings with it the report from medical officers attached to the War Department that there are 56,000 men in the United States Army who are mentally deranged as a result of shell shock, crowded barrack conditions, difficult marches, and strenuous trench life.

CONFERENCE OF INDUSTRIAL PHYSICIANS AND SURGEONS

Problem of Physical Reconstruction and Industrial Rehabilitation of War and Industrial Cripples Considered—Fitting Individuals for Remunerative Occupations

On December 6, 1918, there was held at the Bellevue-Stratford Hotel, Philadelphia, the Seventh Conference of Industrial Physicians and Surgeons under the direction of the Pennsylvania Department of Labor and Industry.

The entire program was devoted to the problem of the physical reconstruction and industrial rehabilitation of the war and industrial cripples. Papers were presented by Mr. Harry A. Mackey, chairman of the Pennsylvania Workmen's Compensation Board, Mr. C. B. Auel of the Westinghouse Electric and Manufacturing Company, Dr. Alfred Stengel of the University of Pennsylvania, Lieutenant-Colonel Harry E. Mock of the Surgeon General's office, Major R. Tait McKenzie of the University of Pennsylvania, Mr. H. L. Brunson of the Federal Board for Vocational Education, and Mr. Douglas C. McMurtrie of the Red Cross Institute for Crippled and Disabled Men.

So far industry has paid for industrial accidents through the various state compensation laws. To this aid there should be added, as a function of the state, the provision of mechanical aids which will fit the individual to take up a remunerative occupation. Following this the state should train the reconstructed man to follow the occupation for which he is best suited. After the training the state should place him in a suitable occupation.

The Pennsylvania Department of Labor and Industry more than a year ago made a survey of the industries of the state with a view to ascertaining how many cripples could be placed in positions. At last account there are more than 47,000 openings in Pennsylvania industries for persons with various disabilities. A full account of this work may be found in Bulletin Number 2, Volume 5, of the Pennsylvania Department of Labor and Industry.

The importance of the prevention of disability through industrial disease was presented, and emphasis was laid upon the necessity of physical examination in fitting the worker to his job, upon the avoidance of fatigue, of monotony, of exposure to extremes of temperature, of overcrowding, and upon the minimizing of the evil effects of trade poisons.

Copies of the proceedings of this conference may be obtained by addressing the chairman of the conference, Dr. Francis D. Patterson, chief, Division of Hygiene and Engineering, Department of Labor and Industry, Third and North streets, Harrisburg, Pa.

FROM OUR FIELD EDITORS' NOTEBOOKS

Beautiful Tudor Building and Lovely Surroundings Devoted to Care of Blind—A Community Hospital Which Furnishes Excellent Laboratory Facilities—Economy of Construction Featured in a Memorial Building

**Evergreen (U. S. Army General Hospital No. 7),
Baltimore**

Anything less typical of a hospital, and especially a military hospital, than this remarkable institution would be hard to imagine. I visited it on one of those days early last autumn when summer still lingered in the air, and it was easy to see what a delight the gardens and park-like



Fig. 1. "Kernwood," which serves as headquarters for the military staff and residence of blinded officers at Evergreen.

grounds must be in their prime. Evergreen, Jr., formerly the home of Mrs. T. Harrison Garrett, and now the home of the enlisted blind men, is a beautiful Tudor building, expressive of dignified leisure, culture, and luxury. "Why devote all these lovely surroundings to the care of blind men?" is the very natural question often asked. The answer given is that the minds of the blind are very susceptible to the influence of that beauty which their eyes may no longer perceive. I suspect that there is, in addition, another reason. The education of the blind man to meet the changed conditions of his lot often means the education of his family as well; the family must be won over to confidence in the kindly wisdom guiding the blind member's education if they are to cooperate with it or even permit it to continue. The very aspect of this beautiful residence, sedate and stately yet friendly and homelike, is well adapted to soothe the harrowed feelings and restore the confidence of the seeing mother or wife, sister or brother, who, perhaps, feels the blind man's misfortune more keenly than he does himself.

Col. James T. Bordley, director of the staff of the institute, tells of a mother who wired him, "Send my boy home. No science and no money can do for him what a mother's love can do." Colonel Bordley did not stop to argue with that mother; he took a train for her home and brought her back to Evergreen on the next train. (The Red Cross, by the way, maintains a house near Evergreen expressly for the purpose of entertaining members of patients' families whom it may be necessary, for the patients' welfare to bring there.) He showed her not only the house with its cheer and comfort and luxury, but the Elizabethan garden, the swimming pool, the bowling alley, the dancing

pavilion, the gymnastic hall, and the Red Cross Institute where are held classes in typewriting and in various vocations. That mother went away convinced that Uncle Sam, in the person of Colonel Bordley and his staff, knew what was best for her boy and was doing it.

On page 206 of *THE MODERN HOSPITAL* a group of pictures shows more clearly than words can tell just what the workers at Evergreen are able to do for our sightless men.

"Tell the readers of *THE MODERN HOSPITAL*," said Major Ardan, the commanding officer of Base Hospital No. 7, to me, "that the problem of the rehabilitation of the blind is a moral problem. The blind man needs to be helped, but he needs to be helped to stand on his own feet—to feel that he is still a man among men."

Decatur and Macon County Hospital

One of the outstanding facts that confront a visitor to a large number of institutions in various parts of the continent, is the absolute lack, in many of them, of either laboratory or x-ray facilities. Even where this equipment is installed, the lack of competent personnel for the interpretation of the work is often apparent in a great number of large institutions, and still more frequently in small community hospitals.

The status of affairs is undoubtedly due, primarily, to a lack of understanding on the part of administrative boards regarding the necessity of this equipment, and, secondarily, to an inability to meet the financial outlay involved. As a result of the lack of these facilities, however, physicians using such hospitals get in the habit of relying entirely on their physical findings, since they do not have the advantages of the supplemental information that should be furnished by the well-rounded-out laboratory.

All of these things being true, it is rather refreshing to find a small community hospital that has fully accepted



Fig. 2. Decatur and Macon County Hospital.

its obligation and has worked out a means of financing that not only permits of a better medical performance but is also a source of a little revenue to the institution itself. Such an institution is the Decatur and Macon County Hospital at Decatur, Ill., of which Miss R. Helen Cleland is superintendent.

While this institution has not arrived at the stage of ideal laboratory practice, yet it is so far in advance of the average institution of its size that a statement of its

performance would seem to be of interest as an indication of what can be done with a proper understanding of the needs of a hospital and an effort to furnish these needs.

The Decatur and Macon County Hospital was opened on January 1, 1916. The hospital was built with a capacity of 100 beds, but, because part of it has had to be used for nurses until the nurses' home can be built, the present capacity is but sixty-five beds. A new addition of more than seventy-five beds is now in course of construction, which will in all probability be ready for occupancy early in the year.

The hospital is operated entirely from the revenue derived from pay and part-pay patients, together with that derived from Macon County and from the city of Decatur. A perusal of the annual report indicates that approximately 5 percent of the work done is for absolutely free patients.

The privileges of the hospital are open to all recognized physicians. It admits every character of cases except infectious diseases. While pathological work is not done as a matter of routine on operative specimens, the laboratory report shows that the laboratory is used quite extensively for this character of work, but more especially for bacteriological work. In one year a total of over two thousand various examinations were made, which, it can be readily seen, is rather a large number for an institution of this size. The submitting of specimens by doctors for other than patients of the institution is encouraged, and the community has responded very remarkably in this respect. The institutional laboratory is in charge of a well trained, full-time technician and has the benefit of advice from a well developed laboratory man in the community.

The outstanding point is that this institution had its inception in a vision of what would be needed and a belief that, with the furnishing of these facilities, the community would respond in sufficient volume to justify the financial outlay.

That the development is financially a success is evidenced by the annual report, which shows a credit on the proper side of the ledger of approximately \$300 for a

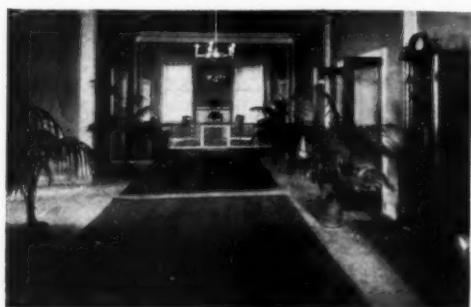


Fig. 3. Reception hall of Decatur and Macon County Hospital.

year's performance. However, this financial gain is of but passing moment when taken into consideration with the very material increase in the efficiency of the medical work done, as this work can not be done in these days without the supplemental facilities furnished by a well-equipped laboratory.

Decatur and Macon County Hospital is to be congratulated upon its performance, and it is hoped that its example can be followed to a lesser or greater degree in a great many communities now entirely devoid of laboratory facilities.

The Frederick Wilcox Chapin Memorial Building of the Springfield Hospital, Springfield, Mass.

The actual work on this building was begun in the early spring of 1914, and the building was dedicated on February 11, 1915. This memorial to Dr. Frederick Wilcox Chapin, a trustee of the Springfield Hospital, is a substantial, straightforward structure with no needless decoration. It is built of steel and brick with stone trimmings. Its walls are concrete, its partitions gypsum block, and it is throughout as fireproof as modern building methods can make it.

On each of the first and second floors there are fourteen private rooms for patients, and on the third floor, eighteen rooms. Some have bath and toilet, and some toilets only,



Fig. 4. Frederick Wilcox Chapin Memorial Building.


but all have clothes closets. On each floor, of course, there are general bath and toilet facilities, while adjoining the elevator, which is located at the front end of the building, are the utility rooms and diet kitchens. The general bath and toilet, the maid's service closet, the doctor's sink, and the linen closet, on each floor, are very conveniently and compactly placed as a single unit on one side near the center of the building. At the end of each of the three floors are sun rooms, which, while light and pleasant, should have been built with a much larger floor area, so as to admit wheeling a goodly number of the patients into the open air. On the first floor is a very attractive reception room where visitors and incoming patients receive a friendly first impression of the place.

In the basement are the kitchen, pantries, storerooms, maids' rooms, and a completely equipped pathological laboratory. Opening from the laboratory is a small autopsy room.

The operating pavilion and x-ray department occupy the fourth floor. Here are two modern operating rooms, two etherizing rooms, surgeons' wash room, utility room, nurses' work room, a sterilizing room, locker rooms, toilet rooms, and an office for surgeons. In the x-ray department are the main operating room, switch room, dark room, and a small waiting room.

Automatic phones connect the service room and halls, and the majority of the patients' rooms have a city phone. Nearly all of the electric lighting is by the indirect system.

One of the interesting features of this building is that it is one of a group of six buildings which will be similar in design and which constitute part of a comprehensive plan for the future growth of the hospital, worked out and submitted in March, 1912, for the purpose of insuring the utmost efficiency of operation and economy of construction to the institution throughout its continued development.



The
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Hospital Policy in Relation to Health Insurance

What is the policy of the hospitals of the country toward compulsory sickness or health insurance? If by policy we mean attitude, the hospitals' policy is one of friendliness, due in part to the belief that compulsory health insurance will fortify the hospitals financially. If, however, by policy we mean a set of measures or a system of administration designed for the protection or promotion of the interests of the hospitals, the hospitals have no policy, or at any rate, have announced no policy in relation to health insurance.

It is a fair assumption that the country is moving in the direction of compulsory sickness or health insurance. Reasons for this assumption are (1) the force of the example of England and of eight other European countries with whose social insurance laws the people of this country are rapidly becoming familiar, (2) the general favor with which the proposed legislation is regarded by the extremely active and influential body of social workers in the United States, (3) the appointment of no less than eight state commissions to investigate health and other forms of social insurance, (4) the support of the movement by numerous public health administrators and experts, (5) the gradual but irresistible swing of organized labor from opposition to support, (6) the present sympathetic attitude of the leading po-

litical parties toward the demands of labor, (7) the willingness of labor, officially expressed through state labor federations, to assume half the cost of the proposed insurance, and (8) the readiness of various state legislatures to act upon social reform measures which do not threaten to add to the troubles of the overburdened taxpayer and, incidentally, of the legislator. I say nothing here of the need of health insurance; that is another story.

Several years ago the American Medical Association, without officially declaring itself to be for or against compulsory health insurance, thought it wise to lay down certain minimum requirements, the incorporation of which in any bill on health insurance was demanded on behalf of the medical profession. These minimum requirements, which are quoted from memory, were (1) adequate representation of the medical profession on administrative and advisory bodies concerned with the administration of the law, (2) free choice of physician by the persons insured, (3) payment of physicians in proportion to the services rendered, rather than on a flat capitation basis, and (4) separation of the function of treating disease from the function of certifying disability and the right to cash benefits. Should not the hospitals now approach the subject in the same practical way and tell those who are engaged in framing the proposed laws just what is required in order that the hospitals may not unduly suffer and, what is more important, in order that the worker may be assured of his just dues? Is not the worker interested in the reasonable maintenance of hospitals and in the protection of hard-won hospital standards?

Effective hospital service demands, among other things, sanitary buildings, an adequate nursing staff, and a sufficient food supply. The ward patient is not expected today to defray the whole cost of these fundamental necessities, but according to his circumstances, he may pay part of their cost or none; whatever remains to be paid is charged up against either some local governmental authority or against private philanthropy. Such is the prevailing practice. Now, however, comes the worker demanding hospital care as a right and not as charity, and proposing that mutual insurance funds created under a health insurance law and contributed by employers and employees, shall bear the cost. And immediately a whole series of questions arise to be answered.

How much should the funds be asked to pay for hospital maintenance? By what means and according to what standards shall the value of hospital service be appraised? If an individual patient prefers a higher grade of service than that

which is fixed by the fund as appropriate for the great body of insured workers, shall he be permitted to obtain such higher grade of service, paying the difference in cost from his own pocket? Should the funds seek to make contracts with the cheapest hospitals or with the best? Should hospitals be encouraged or even permitted to bid against each other, or should they become associated for purposes of collective bargaining? Should there be in each state or locality a basic rate for standard service with an extra allowance for service of a special or superior character, or should the rate of payment for maintenance be invariable? Should the insured workers have a right of free choice among hospitals similar to the right of free choice among physicians? Is it desirable that hospitals as well as physicians be represented on administrative and advisory bodies, and, if so, in what manner and by what method should the representatives of hospitals be selected? Should the hospitals in the several localities organize for the purpose of electing delegates to administrative and advisory councils? Is it not obvious that no sickness insurance law can be satisfactorily administered which disregards these questions?

In the preceding paragraph hospital service was mentioned as if it were a thing apart from medical service. Such service as the hospital furnishes is given side by side with and partly under the orders of the physician. The service of the closed or staff hospital—the hospital in which medical practice is limited to designated members of a fixed or closed organization—may even include the professional work of the physician; to the open hospital, however, the physician brings his patient, or the patient brings his physician, as the case may be. Let us consider some of possible relations of hospital, physician, patient, and public, under compulsory health insurance.

At a recent conference on the question of hospital care under health insurance, *the physicians present advised the representatives of labor to insist upon the free choice of physician always—in hospitals as well as out of them.* The workers were told that the staff hospital is a monopoly which should be destroyed and that health insurance presents an easy means to this end. Now, while staff hospital organization presents certain disadvantages to the physicians who are not on the staff, it has a community value which must be recognized. I am ready to concede that the worker should have the right to choose his physician, and that, when he needs hospital care, a hospital should be open to him in which he may be treated by the physician of his choice. If, however, all hospitals become open hospitals, the

community will suffer, for the art of medicine must be taught to the physicians of the future, if medicine is to be practiced intelligently hereafter, and the open hospital is not the one in which clinical teaching can profitably be done. For purposes of research as well as for teaching purposes, superior facilities and opportunities should be available to the best minds in the medical profession. This is required, not in order that certain individuals or groups may profit professionally or financially, but in order that the practice of medicine may be improved for the benefit of mankind. *The open hospital may be desirable for the attainment of individual ends, but the staff hospital is a necessity for the attainment of social ends; and both are compatible with justice.*

If under compulsory health insurance, a patient begins treatment at home with a physician of his own choice and if the patient subsequently enters a hospital with the object of continuing treatment under the same physician, the simplest financial arrangement would be for the "fund" to continue paying the physician for his service in the hospital at the rate provided elsewhere; a separate payment would then be due the hospital to cover the cost of maintenance. In some instances, however, the change from domiciliary to hospital care will be for the express purpose of obtaining the benefits of medical treatment in a staff hospital, and a change of physicians may be sought by the patient himself or may even be recommended by the physician who was originally in charge of the case.

Some of the health insurance bills which are now under consideration do not definitely say that contracts with hospitals are to be for maintenance only; under the provisions of these proposed laws contracts with hospitals might be made to include both medical attendance and incidental hospital maintenance. This opens the door to the possible adoption of one rate of compensation for domiciliary treatment and another for hospital treatment. If hospitals are to be permitted to make contracts inclusive of medical treatment, should medical treatment be contracted for as something apart from maintenance, or should a lump sum be paid to the hospital, to be thereafter apportioned between the hospital and the members of its staff? If hospitals are permitted to contract for medical treatment, there will develop at once a divergence of interest between physicians connected with staff hospitals and physicians practicing elsewhere, and disputes between the two groups may easily arise. In addition, the division of fees might become a bone of contention between hospitals and the members of their staffs. Would it not be far better to separate the two ele-

ments of service from the beginning? Should not the health insurance law itself make separate and distinct provision for medical treatment and hospital service? At all events, this is a fundamental question which should be studied by hospitals and physicians before binding legislation is enacted.

S. S. GOLDWATER.

Marine Hospitals of the United States Public Health Service

If plans now under consideration are approved by Congress and an appropriation is forthcoming, all soldiers, sailors, marines, and others discharged from military service with disease or injuries contracted while in service will find excellent hospital and sanatorium care in the marine hospitals of the United States Public Health Service. This arrangement follows a request of the director of the War Risk Insurance Bureau.

According to the provisions of the war risk insurance act, sickness or injury incurred while in military service and not caused by wilful misconduct, entitled the person not only to governmental hospital care free, but also to a disability allowance which varies according to the extent of the disability and the size of the disabled man's family. It is further provided that the government's responsibility to the men of the military forces began when the men were accepted for military service by the draft boards.

Just how many men will require hospital or sanatorium care under the provisions of the war risk insurance act is impossible to determine at this time. Already, with demobilization just begun, the War Risk Insurance Bureau has under medical treatment 1,724 beneficiaries. Within a short time hospital and sanatorium care will have to be provided for a considerable proportion of the 24,500 soldiers, sailors, and marines discharged from military service because of tuberculosis and for the 50,000 cases of psychoneurosis, epilepsy, and other nervous and mental disorders reported among the military forces up to December 1, 1918.

The suggestion has been made that some of the one hundred and fifty small army posts scattered throughout the United States, especially in the West, be converted into hospitals for beneficiaries of the war risk insurance act. It is not likely that this will meet with the approval of the beneficiaries themselves, for these posts are usually remotely located and dreary. Besides, most of the boys who have done their bit are anxious to get away from army surroundings and they much prefer to be in hospitals located near their homes or near a larger city.

The plan now before Congress would enable the

United States Public Health Service to enlarge the capacity of twenty-two marine hospitals from 1,689 to 5,208 beds, and, in addition, provide for 2,459 beds in new hospitals and sanatoriums to be built in various parts of the country. Already there are under consideration sites for tuberculosis sanatoriums in New England, in the mountains of Kentucky, and in the far West. The public Health Service now maintains a tuberculosis sanatorium at New Mexico.

The plan of having the United States Public Health Service undertake the hospital and sanatorium care of the beneficiaries of the War Risk Insurance Bureau possesses a number of advantages. It would reduce to a minimum the outlay for administration overhead construction and administration; then the favorable location, near larger cities, of most of the existing marine hospitals should be considered; there also would be an undoubted advantage in having the matter handled by a hospital organization which has had long practical experience and has operated its service successfully; finally both the War Risk Insurance Bureau and the Public Health Service are parts of the Treasury Department, a fact which would undoubtedly lead to the closest possible coordination of activities.

A New Era for the Handicapped

The world really does move, and its movement, on the whole, is in a forward direction. One may sometimes doubt it, but a group of articles like those which we publish this month by Sir Arthur Pearson, the noted blind publisher and leader in the education of the blind, Mr. Douglas C. McMurtrie, director of the Red Cross Institute for Crippled and Disabled Men, and Dr. J. O. Cobb, senior surgeon in command at the U. S. Marine Hospital, Chicago, must dispel pessimism on the subject. In its attitude toward the crippled and disabled, the world has made progress. Mr. McMurtrie shows with what cruel derision and sardonic suspicion the middle ages regarded the crippled and disabled; Sir Arthur Pearson and Dr. Cobb explain some of the steps which are now being taken to make the handicapped man happy and useful to the world.

The callous neglect of the past has been not merely inhuman but wasteful. The war, while it has quickened our sense of duty toward those who have suffered in it, has already taught us to see the extravagant stupidity in allowing handicapped men to eat their hearts out in idleness, a misery to themselves and a burden to the world, when a little help would put self-respecting independence within their reach. Not merely the dis-

abled soldier or sailor of this war, but the handicapped civilian of all future times as well, and still more the public is going to profit by this new light on the problem of the disabled. This gain to the industrial world is very well illustrated by a story which Mr. McMurtrie tells in another paper.¹

A worker in Massachusetts was permanently disabled by an accident to his hand in the course of his work. Under the law he was awarded a compensation of ten dollars a week, to cease after a total maximum of four thousand dollars had been paid. After the compensation had run for nearly a year, the attention of a new official was directed toward the case. Finding the man capable of rehabilitation for self-support, the insurance company official put before him the proposition of reeducation at the company's expense. The arrangement, he was frankly told, would be to the company's advantage, but it would also be to his advantage, too, inasmuch as ability to earn a good livelihood would be far preferable to an unearned income of ten dollars a week. The injured man accepted the offer, and the insurance company sent him to the Red Cross Institute for Crippled and Disabled Men in New York, where he took an eight-weeks' course in oxyacetylene cutting and welding. While he was taking the course the company paid him, not the ten dollars a week required by law, but forty dollars a week, twenty to him in New York and twenty to his wife at home; they also defrayed his traveling expense both ways. He is now making twice as much as he had ever earned before the accident.

Thus, says Mr. McMurtrie, "in the whole transaction every party at interest was benefited. The man was advantaged in that his general living standard was distinctly raised, and the necessity of working for his living could not be considered as a hardship. The company paid less than five hundred dollars for his rehabilitation, and this expense, in conjunction with the five hundred dollars already paid in weekly compensation during the first year of idleness, made a total for the case of one thousand dollars. They were thus enabled to charge three thousand dollars of profit to the account of profit and loss. Had the course of training been earlier begun, there would have been saved five hundred dollars more. The community was infinitely the gainer in that the man, formerly an unproductive consumer, became a useful producer instead. The community further gained in the elimination of the disabled man from the category of a prospective dependent,

because while compensation might have taken care of him in a very insufficient way during the period the payments ran, there would have come a time when compensation ceased, and then he would have been in desperate economic status indeed—confirmed in habits of idleness, untrained for skilled work, and without any source of support."

As Mr. McMurtrie suggests, there need be no cost in the rehabilitation of the industrial cripple, but rather a great economic and social saving. Further, accident cripples not under protection of workmen's compensation laws, congenital cripples, and disease cripples, are in need of legislative assistance, not only for their own sakes but also because "the elimination of dependency due to physical handicap will lift a colossal burden from the agencies of philanthropic relief." It is too soon to estimate how great a gain may be made by such means, but that there is tremendous gain to be made can not be doubted.

Some Changes in the Editorial Board

The list of names at the head of the editorial page this month contains some changes—two representing very welcome accessions and one a much-regretted loss.

For some time THE MODERN HOSPITAL has felt the need of representation in Canada and on the Pacific coast. This expansion is due not only to this magazine's continental—if not international—position as the organ of hospital people, but also to the ever-increasing importance of hospital interests in the north and the west of the American continent. We have been especially fortunate in securing the cooperation of Mr. H. E. Webster, superintendent of Royal Victoria Hospital, Montreal, and of Dr. R. G. Brodrick, superintendent of San Francisco Hospital, San Francisco. With the aid of these two able administrators, we believe, THE MODERN HOSPITAL can not fail to become even more valuable and useful to readers.

On the other hand, it is with great regret that we have to record the severance of Dr. Hornsby's connection with the editorial staff. It had been hoped that when his important work for the government was finished Dr. Hornsby would be able to resume his editorial duties. He is, however, undertaking important work for the American College of Surgeons, which will demand all his time and attention for some weeks, after which period, under the firm name of "John A. Hornsby and Son, Consultants in Hospital and Health Problems," he, assisted by his son, will serve the hospital field as a consultant on plans, reorganization of hospitals along economic lines, staff

¹ McMurtrie, Douglas C.: Future Policy in Dealing with Disabled Civilians; Some Conclusions from Experience, *Med. Rec.*, Jan. 25, 1919, p. 142.

organizations, and other problems. What the hospital world loses through Dr. Hornsby's relinquishment of his editorial post, it will gain through his new activities. The need of expert advice on hospital matters is constant and widespread, and no one is better qualified than he is to supply it. We are sure that we speak for the entire hospital world when we say that the universal good wishes which will follow Dr. Hornsby into his new field are inspired not only by admiration of his brilliant record in the past (a part of which is briefly reviewed in another editorial) but by sincere affection and real gratitude for what he has done toward the advancement of the hospital profession.

An Exceptionally Beautiful and Fitting Memorial

A very interesting architectural study is presented by the Benjamin Stickney Cable Memorial Hospital, described by Mr. Edward F. Stevens on page 157 of this issue. Probably the first impression conveyed by the views is that of the exceptional beauty and dignity of the architectural scheme. The treatment of the operating room window, in particular, is unique, and the wide terraces and airing balconies make the most of the natural advantages offered by the location.

The plans evidence a careful and skillful adaptation of means to end, making the Benjamin Stickney Cable Memorial almost a model small hospital. "Almost" a model—for, although it is an ungrateful task to pick flaws in such an excellent design, we must regret that the delivery room has been placed in the operating suite. In spite of the theoretically perfect asepsis of the modern hospital, this location is, in our judgment, not justified even by the necessary limitations of space in a twenty-bed institution. Not only is the danger of cross-infection thus increased; the entire operating suite is unavailable for urgent emergency work during the often protracted period of the delivery. No matter how small the hospital, one room should be set apart for obstetric work exclusively.

The many admirable features of the plan will, however, repay careful study. The isolation suite, in particular, deserves notice.

The Modern Hospital Year Book

Shortly after the appearance of this issue of *THE MODERN HOSPITAL*, every hospital superintendent in the country will receive a copy of a volume of 734 pages to be known as "The Modern Hospital Year Book." This book contains, besides a survey of the needs of the hospital in its various departments, lists and descriptions of

products, commodities, and devices made by responsible concerns and suitable for hospital use, thus constituting a reference book for superintendents and purchasing committees. The book is not issued for sale, but a copy will be lent without charge for a year to any architect, member of hospital building or equipment committee, or other person having a legitimate use for it. One of the most imperative demands made on *THE MODERN HOSPITAL* from the time of its inception has been for information in regard to the latest and best in hospital supplies and equipment. During the chaotic period of the war, this demand became more insistent than ever before. An adequate response, it was felt, involved the preparation of something like an encyclopedia of supplies and responsible manufacturers. The result was "The Modern Hospital Year Book." It is planned to include in future issues a survey of hospital progress for the year. The service rendered to the hospital field by such a reference book will, it is felt, be a most important one, and the need for it can not fail to increase with the inevitable increase in hospital activities following the war.

Dr. Hornsby Leaves the Army

Dr. Hornsby, whose retirement from the editorial board of *THE MODERN HOSPITAL* is recorded in another editorial, is now discharged from the army and will hereafter confine his activities to hospital consultation. We know that our readers will be glad to learn something of Dr. Hornsby's work in the nation's service and of his future plans.

At the outbreak of the war, Dr. Hornsby was called into service immediately as chief of the board of medical examiners in the central department. During the three months following December, 1917, when the southern camps were beehives of recruits in training and epidemics of contagious diseases, especially meningitis, were raging, Major Hornsby, at the request of the Secretary of War, visited nearly all the army camps and military hospitals in order to make the necessary changes to improve conditions for suppressing the epidemics. In April following, Major Hornsby was appointed by Surgeon-General Gorgas as chief of the division of hospital construction and also chief medical inspector of military hospitals with the rank of lieutenant-colonel, United States Army. In connection with this work, Colonel Hornsby had charge of the location, planning, construction, and equipment of all general and special military hospitals and of all appropriations for the department. Just before the armistice was signed, he began a campaign to

create more than a hundred thousand hospital beds in different parts of the country so that the sick and wounded from overseas could be returned to their own homes for convalescence, cure, and rehabilitation. Forty thousand of these beds had already been acquired when peace came. In the course of his service Colonel Hornsby traveled more than fifty thousand miles from army post to army post and from camp to camp.

Secretary of War Baker, in giving testimony before a committee of the United States Senate, spoke of his great respect for Colonel Hornsby's judgment, as that of "a most efficient hospital man" and "one of the ablest minds in the country."

Colonel Hornsby is now engaged in an advisory capacity with the American College of Surgeons; after the completion of this work, he will establish consultation offices at 541 Munsey Building, Washington, D. C. He will have associated with him his son, Mr. Hubert Hornsby, who also is just discharged from the army after a continuous campaign of twenty months' hospital service in France and Flanders.

Undoubtedly, as time enables him to do so, Dr. Hornsby will be back with his pen for renewal of friendships in the field of hospital literature.

The Care of Infectious Diseases in the Hospital

A series of articles by Dr. D. L. Richardson, superintendent of Providence City Hospital, Providence, R. I., dealing very fully and completely with the care of infectious diseases in hospitals will begin in the next issue of THE MODERN HOSPITAL.

The first paper will be devoted to "Transmission of Infectious Diseases"; it will embrace the common infectious diseases which should be admitted to a hospital, their causative agents, and the route by which they leave the body, and will cover the modes of transmission, particularly under hospital conditions. The second article will discuss "Aseptic Nursing," including the origin of aseptic nursing, its use in French, English, and American hospitals, and will present statistics of cross infection; the third, dealing with the construction of hospitals for infectious diseases, will consider the size, site, plans, and arrangements of buildings. The fourth and fifth articles will deal with the management of this class of hospital; the fourth paper will be concerned with the general management and questions relating to the medical and nursing staff and employees, while the final article of this series will consider questions of management in detail, including aseptic nursing technic.

Dr. Richardson's series will be accompanied by several other papers on the same subject. Among these will be one written by Dr. J. G. Wilson, Passed Assistant-Surgeon of the Public Health Service, for which plans have been prepared by Mr. N. V. Perry, consulting engineer of the Bureau of Public Health Service.

Planning Largely

From the very incipency of a hospital project, those in charge should have some vision of the future growth of the institution.

Very few hospitals fail to require expansion from time to time, and nothing should be built which does not fit into a definite scheme providing for the ultimate needs of the institution. And this scheme should be developed quite completely at the outset.

Where new hospitals have been started in a small way on fairly large plots of ground this prevision has sometimes been exercised, but, unfortunately, not always. The danger of a lack of foresight is likely to be greater in the case of a hospital started in a modest way, possibly in a remodeled residence on a comparatively small plot. In such a case the possibilities as to the acquisition of adjacent property, and the manner in which the hospital can be developed on such property, should be a matter of first consideration.

Care of Beds and Bedding

A great deal of attention should be given the beds, for a comfortable bed means so much to the patient. The important part is the mattress, which should be carefully protected with rubber sheeting or other impervious covering to prevent blood stains, etc. The sheeting must be watched for pinholes or cracks and exchanged or repaired as often as necessary. It should never be folded and laid away. Always hang it over a round pole. Sheet- ing, when worn, can be pieced so that no waste need occur. Sterilizing mattresses ruins the ticking in time and unless carefully done it damages the filling, whether it be hair or cotton. If the mattresses are placed on a rack in the open where the air and sunshine can penetrate them, the same purpose is served and they are kept fresh, soft, and pliable. Pillows should be treated the same way. Mattresses should never be stacked on top of each other in storage but should be placed on racks. When purchasing new mattresses and pillows, be sure to get them from a reliable firm, for many of the mattress factories are very insanitary and are germ-breeders. Visit a few of them and see for yourself.

Make Your Window Heads High Enough

The hospital superintendent, in checking over the plans, should assure himself that the architect has carried the window heads as close as possible to the ceiling. The tendency of the architect in ordinary construction is to drop the window heads some distance below the ceiling, because of the more pleasing effect in the interior of the room. In the case of the hospital, however, the necessity of ample ventilation requires that the window heads be as close as possible to the ceiling within one foot. As the ceiling in the hospital is generally at least two feet higher than the ceiling in ordinary houses, and as the window sill should be low enough to allow the patient in bed to see out the window, the architect must accept the unusual situation and adopt a much longer type of win-

dow than any which he would use in ordinary work. This seems elementary but it is worth insisting on.

Give Your Department Heads a Chance to Grow

It is poor policy to economize on the salaries of heads of departments. The efficient ones will not remain long with the hospital unless they are suitably compensated and the inefficient ones are dear at any price. The superintendent should determine the broad policies for the various departments, but should leave the routine operation of them to their heads. It is not wise to interfere too much with departmental heads. The best way to develop them is to give them all the responsibility they can carry. When given responsibility, it is surprising how rapidly they will develop.

A Quick-Action Repair System

The following repair system which has proved successful in some institutions is worth consideration. When a needed repair is reported, as, for instance, a broken lock, a triplicate order is made out, the original for the engineer, the duplicate for office record, and the triplicate as a paster or tag to be attached to the part needing repair. The tag or paster remains on the broken part until removed by the repair man on the completion of the repair, and serves as a constant reminder that an order has been issued, with date. This system tends to promote quick action, for no engineer cares to have a lot of placards continually announcing that he has not performed his task.

Checking Up the Food Waste

Those who have not put in practice a food waste accounting system should carefully examine the system suggested in a booklet issued by the United States Food Administration entitled "Institutional Food Conservation," containing suggestions adapted to state and public institutions.

A proper system will enable the superintendent to know by a record on his desk whether his employees and patients are being served too much or too little of any particular article of food, as well as whether or not the quality or preparation is satisfactory.

Loose-Leaf System for Medical Order Books

Medical order books such as used on the floors for physicians' orders, etc., are quite an item of expense when bound books are used. The loose-leaf system such as students use is very much more economical, providing paper with fine ruling on both sides is purchased so that as much writing can be crowded on a page as possible. Loose-leaf covers 9 by 11 can be purchased for about 40 cents each and will last for years.

THE LATCHSTRING OUT

MR. DOUGLAS C. MCMURTRIE, director of the Red Cross Institute for Crippled and Disabled Men, New York City (whose article, "The Attitude of the Middle Ages Toward the Crippled and Disabled," by the way, appears in this issue), looks at the problem of rehabilitation of the handicapped not merely from the point of view of a philanthropist, but also from that of an employer. Upon the occasion of a recent visit to our office, he told us that he was an employing printer and that he spent almost an hour a day in his own printing shop among the workmen, while it is well known that anywhere from ten to fifteen hours of his time daily is consumed by his labors in the interest of soldier and civilian disabled and crippled men.

DR. ARETAS E. KEFFORD, Iowa state lecturer on tuberculosis, whose interesting letter on the Community Hospital Organization at Creston, Iowa, established by Dr. C. E. Sampson, on page 200 of the September issue, will be remembered by our readers, recently brought to our office news of further progress in this movement. Dr. Kefford was instrumental in organizing the Washington County Hospital at Washington and the Jefferson County Hospital at Fairfield. He believes that the Creston hospital movement marks a distinct step forward not only for the state of Iowa, but for rural hospitalization in the United States.

The salient feature of the plan is that it incorporates into a whole the individuals and organizations of the community for the health, enlightenment, and upbuilding of the community. Six counties, with a total population of 100,000, have been organized into the Greater Community Association, within which is the Greater Community Hospital Association. Churches, schools, and individuals are paying members of this association. The community hospital is the center from which radiates health and education. A contagious disease hospital and a tuberculosis annex are planned.

MR. FRANK E. CHAPMAN, superintendent of Mount Sinai Hospital, Cleveland, while on a visit to our office, told us of a unique system recently installed in his hospital for the purpose of increasing the efficiency of the service rendered to patients. Mr. Chapman's fundamental idea is to make the patient feel that it is his viewpoint which is to be considered in conducting the service of the hospital, and to this end, he encourages the patient to offer criticisms and suggestions. Shortly before his discharge from the hospital, the patient receives a letter asking, in an informal way, for his ideas on bettering the service. This letter is an individual one, ruled on the back to facilitate reply. Each answer is acknowledged by a letter which is signed personally by the superintendent of the hospital and, where pertinent, specific mention is made in the letter of the suggestion, complaint, or criticism offered. In cases which justify it, the superintendent makes a personal visit to the patient and talks the matter over with him. Mr. Chapman reports that about 90 per cent of the patients take advantage of the opportunity thus offered them, and adds that many constructive criticisms and suggestions have been received in this manner. By way of illustration, he tells of one patient who complained that, when she rang for the nurse, the signal over her door (which, of course, remained lighted until the nurse answered the call), reflected in her eyes and bothered her. A little opaque paint on the extreme end of all nurses' lights remedied the defect and cured an ill which perhaps would not have been thought of had it not been called to the attention of the authorities.

Several months ago when the new nurses' home at Mount Sinai was opened, the building which formerly housed the nurses was transformed into a nursery which now accommodates seventy-five children. It includes seventy-two private and semi-private rooms.

Mr. Chapman is an advocate of the ward idea, as opposed to that of cubicles. At Mount Sinai there is a system of sixteen bed wards with eight isolation rooms. If the condition of the patient admits it, he goes into the isolation room. After he is convalescing, he is put into one of the wards. There is no differentiation of pay, part-pay, or free patients in the wards. The cubicle system, he feels, means increased construction cost and increased operating cost, and no greater degree of safety from cross-infections is secured by its use than that which is afforded by care and good technique with the ward system.

THE MEMOIRS OF A HEAD NURSE

VIII. When Jerry Came Over—Being One Night's Story in the War History of the Head Nurse

"Rain and mud, mud and rain, and dim lights, and a flare in the sky," grumbled the head nurse as she scraped the mud off her rubber boots on the taut rope that

you do, but I'm not going to talk about it or think about it either before they get here. And besides, what's the use? If a shell or piece of shrapnel has your name on it you'll get yours, and if it isn't your time yet you won't. I don't believe it would be such a bad way to go, anyway. I would just as soon have a Jerry pill knock my head in as to wear out my heart and nerves in a hospital back



Red Cross Hospital No. 110, Coincy, France, in August of last year. Above, the nurses are just arriving, seven days after construction was begun; below, they are washing their clothes. The large central picture shows part of the evacuation hospital of the twenty-sixth division, in France, with American convalescents.



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The tent hospitals shown in these pictures are not at the front, but they resemble in several particulars the field hospital described in the story of the "Head Nurse" this month. The two smaller pictures at the upper left and lower right respectively show American

stretched down from the field hospital tent to the tent peg, before she opened the flap to enter. "If I live to be a hundred, they will always make me think of France and the war."

"Yes, rain now," said the British V. A. D., "but I'll wager that by nine o'clock it will be clear again and the moon will be up, and we'll be a fair target for Jerry when he comes over the lines to drop his pills. Before another morning, perhaps, some of the men or some of us may be 'going west.'"

"Oh, cut it out," said the head nurse, a bit irritably, "I don't love the Gothas or Jerry's pills any more than

home or come to my finish with some lingering old thing that would lay me up for years before I could get away. Entrez, mademoiselle. We are probably due for another convoy tonight, and it is up to us to be ready for it, even if Jerry does come over."

Like many other field hospital tents back of the lines, this hospital had a floor of earth, with boards to walk on down the aisles and in between the beds. Small double windows in the canvas at regular intervals kept out the weather—and the air, too, because the *poilus* and even the *médecin-chefs* of high degree had a wholesome fear of fresh air for the sick. The beds were like cots, cov-

ered with red or gray blankets. At one end of the tent was a row of wooden tables against the canvas for preparing food, medicines, and dressings, while down the center aisle were other small tables where the patients' records and doctors' orders were kept. Beside most of the beds were crude tables or wooden boxes and ammunition cases that served to hold the men's personal belongings or their food and dressings.

The tent was lighted by one arc light in the middle of the roof, with smaller incandescents at each end near the exits and another at the nurse's table. Fifty beds filled the tent, and every bed had a man in it. The whole place was strangely silent. Once in a while one could hear a sort of muttering from some of the beds, as of patients in a delirium, and from one bed near the entrance came the sound of the heavy, stertorous breathing indicative of coma.

Near the farther end were two stretcher-bearers, rolling a silent figure in blankets. Placing it on the stretcher, they clattered out slowly and awkwardly over the boards in the aisle. One of the bearers was a Boche prisoner; the other was a Scotchman with three fingers missing from one hand and a perceptible limp in his gait.

As she entered, the head nurse was strangely picturesque, in her uniform of gray, with stiff, white linen cap bedecked with a tiny red cross in front, and her cape of dark blue lined with brilliant crimson thrown back over one shoulder. She came down the center aisle to the chart table, and a young girl seated there stood up. She was a very young girl, wearing the pale blue uniform of the American Red Cross nurses' aide, blonde and pretty as a poster picture, but now pale and white, with dark circles under her blue eyes. She was one of the many who had left beautiful homes and everything they could wish for, to come to France, where they must wade through the mud, help cleanse the filthy pus wounds of men in agony, and often have for food only boiled horsemeat and moldy bread.

"How is everything?" asked the head nurse.

"About the same," answered the girl in blue. "The man who came in with the big head wound this morning—they have just taken him out. I think you saw the stretcher bearers as you came in. Jules, near the door there in No. 25, his breathing is bad. He can not last long."

"Yes," said the head nurse softly, "I know. And the others?"

"All right, I think. Some of the temperatures are high, but their general condition is good. I helped the two *infirmières* get Tent 5 ready in case we get another convoy tonight and need it. Oh, yes," looking at her notes, "Bartrand, that young infantry officer in bed No. 9, that nice boy with the bad chest wound—he does not seem right to me. His lips are blue, and he sleeps so much. It is hard to rouse him to get him to drink or take his medicine."

A little frown showed on the head nurse's forehead and came down between her eyes. "I'll have a look at him before I make my rounds," she said. "Bring your flash. It is dark over in his corner."

Softly she and the V.A.D. and the blue aide went along to the corner, where in a bed separated from the rest, the young Bartrand lay, apparently sleeping. Leaning over him lightly, with a mother touch the head nurse laid her hand on his forehead.

"Comment ça va?" she queried, in one of the few French phrases she knew.

The boy's eyes opened, dazedly, and blinked in the glare of the aide's flashlight.

"Bien, ma soeur," he said, "ça va mieux."

Suddenly the tent flap nearest them opened. The Scotch orderly entered, reached quickly for the knob that governed the big center tent light, and switched it off. Without a spoken word the aide covered her flash and sprang to extinguish the desk light while the V.A.D. hastened to put out the others. By this time Macdun (short for MacDonald) was creeping along the tent wall behind the beds to be sure that each window was tightly closed. Even shrapnel from your own protective barrage will make nasty flesh wounds and destroy sight.

Overhead there gradually came into hearing a steady, regularly interrupted drone, like that of a malignant insect—then a flash—a great roar, not very far away—and the tent shook like a leaf in the wind.

At the first sound of the raid, Bartrand had started, sitting upright in the bed. The head nurse, helpless in the intense darkness, and fearing to make him more restless by attempting to put him down, held him in her arms. Soon he began to call out orders, rapidly, precisely, like a man who is used to being obeyed, and then still louder, with more spirit, until his voice rang and reverberated through the open spaces of the tent. "Attention!—Allons, mes enfants!—En avant!"

From somewhere in the darkness the voice of the aide, a trifle shaky, said, "He thinks he's going over."

Another flash—another detonation—this time nearer. The head nurse felt something warm and wet soaking the front of her uniform. Then a silence—it seemed for ages. Finally Macdun, flashing on the light, called out, "They've gone, the beggars!"

He came over to the bed and gave one look at the burden the head nurse held in her arms. Then he took off his hat and held it, folded, in front of his coat.

"You can lay him down, Miss. I think there's just work for me and the stretcher-bearers now. The poor laddie's gone west."

RELATION OF HOSPITAL SOCIAL SERVICE TO THE SUCCESSFUL TREATMENT OF GONORRHEA AND SYPHILIS*

Function of Social Worker in Clinic for Syphilis—Medical Care of Hospital and Dispensary Must Be Supplemented by Social Service—Meaning of "Follow-Up" Work

BY IDA M. CANNON, Chief of Social Service, Massachusetts General Hospital, Boston

We shall hear many times during this session of the American Hospital Association of the different problems with which hospital administrators have been confronted during this very perplexing past year. Not the least difficult of these problems to many of our hospital superintendents has been the responsibility placed upon them by the nation-wide program prompted by the Surgeon-General in his effort to control the spread of the so-called "venereal diseases." Such a program as was outlined in the bulletin of the United States Public Health Service (No. 447) is absolutely dependent on a widespread use of the dispensary and hospital facilities of the country.

It is a matter of more than historical interest that, written into the histories of some of our honorable medical institutions, are such sentiments as these: "Persons suffering from alcoholism and venereal diseases shall not be treated, being victims of their own sensual indulgence."

The most significant thing about this is not that it is

* Read before the Twentieth Annual Convention of the American Hospital Association, Atlantic City, Sept. 24-28, 1918.

a puritanical and distinctly antisocial point of view, but that it has resulted in forcing patients with syphilis and gonorrhea either to go without treatment or to resort to the mercy of the ignorant and often vicious quack. And society has all these years been reaping the consequences of this unintelligent attitude.

I know of nothing in the realm of medicine that more clearly reflects the influence of sociology on medical science than the changing attitude towards our responsibility for the care of patients with syphilis and gonorrhea. I say "changing" because we have only begun to see how much rests upon us in the promotion of the government's program. I say "we" because I believe that it must rest not alone on the hospital administrators but also on those whose special concern is the hospital's community relations. I wish today to place before this group of hospital administrators some of the fruits of experience that the hospital social workers have already had in this field. Then you may possibly help us to give greater service both to the patients who will come to the hospitals in greater numbers, and to you in your increasing responsibilities.

In a survey made in 1916, it was found that, out of 126 social service departments, 50 were giving special attention to syphilitic patients, 39 were dealing with the problems of gonorrhea in children, and 31 with gonorrhea in adults. If a similar study were made this year there would undoubtedly be many more on the list, because of the great increase of interest in the subject and the recent legislation in many states. I wish to review briefly some of the various phases of the problems as they have presented themselves to the hospital social workers. I want to show you, if I can, that we have found more to do than merely to manage a follow-up system and to see that salvarsan is paid for.

Here is one worker's conception of the function of social service in a clinic for syphilis with an attendance of about 100 a day and a continuous medical service in dispensary and hospital wards.

I. Within the clinic:

- A. To meet personally and get a minimum social history on every new patient.
- B. To supplement the advice and instructions given by the doctor, regarding treatment, prevention of spread of disease, and interpretation of disease when necessary.
- C. To select with discrimination and after conference with the doctor those cases that need special medical social service; for instance, the young girl with infectious lesions living in a lodging house or the deserted woman with several children, who is sorely in need of bed care but cannot see her way clear to leave her children.

II. Outside the clinic:

- A. To supervise the follow-up system; that it may function to meet the requirements of the various groups of patients.
- B. To place the responsibility for payment for salvarsan properly on one of the following: (1) the patient or family, (2) the hospital, or, (3) another social agency.
- C. To give special supervision to selected groups (determined by doctor and social worker), including (1) all infants, (2) children, (3) pregnant women (including special group referred from a lying-in hospital), and (4) the married group (in interest of the children).
- D. To "round up" for examination members of the families.
- E. To maintain such a relation to the physicians on the one hand, and the patients on the other, that the internal organization acts as a unit to minister to the needs of, not one or a few patients, but the entire group of patients in their proportionate needs.

This medical social worker feels a definite responsibility

to the superintendent of the dispensary to give him the necessary social data that will make it possible for him to determine which patients ought to have free salvarsan, admissions or medicine, and to distinguish those cases in which the board of health should be held responsible and those cases that have any court relations. She also stands ready to give him the necessary social information on cases concerning which information is asked by outside physicians or social agencies. For the ward patients she gives special attention in reporting the financial situation when it is known, in rendering any social service that may be needed while patient is in the hospital, and in knowing to what conditions patients are to go on discharge.

In the teaching functions of a syphilis clinic the well-equipped hospital social worker may be very useful in interpreting the medical-social problems of syphilis to the nurses assigned to service there, to the medical students, and to the social workers who are bringing patients to the clinic. Throughout, her task is largely an educational one.

A rather lengthy report of the experience of the hospital social workers of the country in the medical-social problems of syphilis and gonorrhea was presented to the National Organization of Public Health Nursing at its meeting last May. In that report¹ we gave in some detail the methods that had been developed in meeting the medical-social problems of the infectious syphilitic, the hereditary syphilitic, the vagrant, the prostitute, the special problems of married women with gonorrhea, the unmarried women, and babies with ophthalmia neonatorum. Some of the points made in that report I should like to emphasize again.

Social service departments in hospitals and dispensaries where syphilis is treated have without exception been asked to help secure payment for salvarsan. The question of financing the treatment of syphilis has been somewhat modified by recent legislation, so that in many states it is possible to give free arsphenamine to those in the active, infectious stage who cannot pay. We still must be prepared to determine the ability of the patient to pay and, what is most important, the necessity for continued treatment after the infectious stage is passed; and this may involve financial arrangements even in those cases in which the patient may be able to pay for two or three treatments. Those who live within the limits of the law only, may serve to render the patient non-infectious to those who may be in immediate contact with him, but the cure of the patient by thorough treatment, which alone will satisfy our best physicians and protect possible offspring from possible infection, is scarcely a lesser public health responsibility. Those who are familiar with the ravages of congenital deafness of specific origin and with such eye handicaps as interstitial keratitis and other manifestations of congenital syphilis would plead for further responsibility than interest merely in the cases of the early infectious stage. An adequate follow-up system, supplemented by adequate social service, should make it possible for a clinic to keep this personal hold on the patients until their discharge by the physician.

The question of securing hospital bed care for patients in the infectious stage has possibly been a question more serious to hospital social workers than to hospital administrators. It is easier to refuse admission because of lack of room or special provision for such cases than it is to face the situation with the patient, knowing the social situation well enough to appreciate the possible

¹Public Health Nurse, August, 1918.

consequences of having the patient return to her home or lodging house. Two cases may serve to illustrate the part social service may take in supplementing the medical care that a hospital and a dispensary gives.

The first illustration is that of a single girl, twenty-four years old, a waitress in a large boarding house, who was found suffering from secondary syphilis of known origin. As soon as the diagnosis originally suspected by the physician in the employ of the boarding house had been confirmed by the specialist, the first physician was about to advise the matron to discharge the patient. The medical social worker, after consultation with the specialist, requested the physician to reconsider and to ask the matron to give the girl leave of absence until such time as the physician in attendance considered it safe for the girl to return to her work. This the matron was glad to do because the girl had worked there seven years and was a valuable servant. The girl's only relative in this country was a married sister who had young children and a husband who would have turned his sister-in-law out had he known the diagnosis at the start. The Associated Charities was asked to give emergency relief and to supervise the girl in a lodging house where light housekeeping arrangements were possible and where the girl might cook her own meals and use her own dishes during the time necessary. (This patient was in a community in which, at that time, there was no provision for hospital bed care.) Later the girl was allowed to go to her sister's home, and the brother-in-law, after thoroughly understanding the situation, proved a valuable ally. The girl was most faithful in carrying out treatment and now, five years after the original trouble, is still working in the same place and coming to the clinic once yearly for a Wassermann test, which continues to be negative. She will soon receive her discharge from the clinic.

The second illustration is that of a woman, aged twenty-six, who had been married two years and whose husband had deserted her after one year. When she came to the clinic, she was suffering from secondary lesions of syphilis. She had been working for a small wage since her husband deserted and living with a married sister who has two small children. It was financially impossible, and socially and medically not feasible, to allow the patient to be an ambulatory case in the sister's home. Immediate bed care was arranged for three weeks, after which time the patient was allowed to go to her sister's home and to her work, as she was no longer infectious and, with supervision and treatment, not a danger to anyone. While in the ward the patient admitted probable pregnancy, which had been suspected upon physical examination. The father of the child, who admitted paternity, a married man, agreed to assume financial responsibility for the child but not for its mother. A suitable social agency was asked to assume social responsibility for the patient. The child was born prematurely at a lying-in hospital. The three weeks' hospital care was a small part of this patient's needs, but it was all the hospital care necessary.

With careful planning for after care as soon as the patient is fit for discharge, one bed may be made to serve eighteen or twenty patients a year.

There are two matters of terminology in relation to this subject that ought to be made clear. First, the term "venereal disease" is not acceptable to many of us. It is a relic of the time when the whole subject was approached from a moral standpoint and when there was no scientific discrimination between the two distinct diseases, syphilis and gonorrhea. Since the government has chosen to use the term it will probably be difficult to drop it, but I never use it without an apology. Its use can only add to the confusion in the lay mind concerning two diseases that are, first of all, in no sense similar pathologically and, according to some authorities, venereal in only about 50 per cent of the cases. The moral connotation is intolerable when one has in mind the innocent wife, the little girl accidentally infected, or the baby with ophthalmia neonatorum. While we must agree that in the last analysis the origin of these diseases is venereal, it would seem to me to add to the confusion in the minds of those who believe that the health approach is the more

promising of success if we are to promote the general use of the term "venereal diseases."

Another term that is used without discrimination is "follow-up." There seems to be some confusion in the minds of those who are not familiar with a well run social service department between the function of the hospital social worker and the manager of a successful follow-up system. Those who are familiar with both will agree, I believe, that a follow-up file for the purpose of keeping track of the attendance of the patients can easily be managed by an intelligent woman whose function should be, not merely a clerical one, but also that of adding the element of personal interest which has much to do with keeping the patient coming to the clinic over a long period of tedious treatment. The manager of this follow-up system should feel responsible for seeing that the patient understands when he is expected to return, that it is important for him to return, that he secures his medicine, and, if necessary, that letters are written to those who fail to return. She may even make visits to the home to inquire why the patient has not returned. But this is not what we mean by social service, although some hospital social workers may perform these tasks. In a recent bulletin issued by the Public Health Service, we find, under the caption of "follow-up," these duties outlined:

"**'Follow-up staff.'** The development of a scientific yet 'human' follow-up system is perhaps the most characteristic feature of the 'modern' venereal dispensary, and marks it off most sharply from the policies, procedure, and results of the traditional 'clap clinic.'

"The principal functions will be:

"(a) Supervision of the prostitute patient, including enlistment of the sympathies and support of social betterment agencies for the deserving case.

"(b) Establishment of good 'team work' with the police and reformatory agencies for the purpose of the suppression of the incorrigible type, or at least their temporary isolation for a period sufficient to insure their treatment to the point where they cease to be spreaders of infection.

"(c) Looking up validity of reports from patients as to sources of infection.

"(d) Enlisting co-operation of employers of labor to encourage utilization of the services of the clinic.

"(e) Checking up mentality of prostitute patients and enlisting the assistance of proper authorities in cases of those deserving special handling as mental deficients.

"(f) Keeping track of 'parole' patients of both sexes.

"(g) Looking up patients still in need of treatment who fail to report at the clinic. In some clinics the services of a full-time specially trained 'follow-up' worker will be needed. In others, various part-time adjustments will be necessary."

The term "follow-up" work is used to designate this varied service, which is obviously different from the usual acceptance of the follow-up work of a clinic. The term "social service" is almost as vague; so I presume that it is not for us to throw stones. We must help to develop a more discriminating terminology.

I want to tell you of a few cases that are at this moment in the hands of our social workers at the Massachusetts General Hospital, which will possibly show more clearly than argument the distinctive function of the social worker in the gonorrhea or syphilis clinic.

About ten days ago a little boy of 10 was brought into the clinic by his father, a conductor on the street railway. A diagnosis was made of acute urethritis from a gonorrheal infection. The boy told the medical social worker quite glibly and with no trace of embarrassment of the experience causing his condition. His attitude made the social worker suspect that he was either lying, having been instructed what to say, or that he was a psychopath. The father, much surprised and distressed over the diagnosis,

could give no enlightenment. On a visit to the home, the social worker found that the mother worked out by the day to help meet expenses; that the oldest girl, fifteen years of age, was in charge of the home, and that, although it was the middle of the afternoon, she had not yet dressed. The house was in great disorder, and the five younger children were unkempt and uncontrolled. I will not take time to trace the various steps by which the wretched situation was brought to light. The medical situation at the end of the investigation necessitated emergency admission of an eight-year-old sister into an eye infirmary for a serious gonorrheal infection (she also had vaginitis), treatment for a baby sister of three also with vaginitis, and a gonorrheal infection of the fifteen-year-old girl. The investigation revealed the fact that she had been infected by a cousin in a neighboring state where they had spent the summer, and now this girl of fifteen was practically a prostitute. The original patient, when examined by a psychiatrist, was pronounced a moral delinquent but probably mentally normal. The follow-up of medical treatment is obviously only a small part of the treatment of this case; it must be medical-social treatment if it is to be effective, and the skilled medical care must be balanced by equally skilled social care. Steps have already been taken to place the girl under parole of the girls' industrial school. The mother must stay at home to care for the children and her home, and the boy, aside from medical treatment, may possibly have to have institutional supervision. Let us hope that we may not have to arrange for the education of the eight-year-old girl at an institution for the blind.

A child of three was admitted to an eye infirmary with acute gonorrheal conjunctivitis and vaginitis. The medical and nursing care were started promptly. To safeguard the after-care of the patient and forestall a reinfection, a medical-social worker investigated the situation at home. A distraught mother disclosed the fact that the father, recently returned from a hospital for the insane, had what the doctor called a "bad disease." He had secured some medicine at the druggist. This was the only treatment he was having. Is a simple medical follow-up sufficient in this case? Should that father be at home? Is he responsible for his action? Was he the cause of the child's infection? What is his medical condition? Ought he not to have treatment? These are some of the questions that the medical social worker must answer, and on the answers she must base her plan for helping that family to get back to a basis of decent and healthful living.

A boy of seventeen came to a clinic a week ago with an acute gonorrheal infection. He told the social worker, a man, that he had run away from home a year ago "after a quarrel with his stepfather and had gone to France with a load of horses. The social worker, after several talks with him, persuaded him to write to his mother, and a few days ago a telegram came from her urging him to come. The necessity of continuing his medical treatment has been made clear to him, but he also left the clinic, both with a deeper knowledge of himself and the dangers he was in, and a conviction that he would tell his mother the whole story and try to start again on a straighter road.

Such cases as these are the daily concern of the hospital social worker in clinics where syphilis and gonorrhea are treated and the patient considered as more than a "case."

One superintendent testified that the new law in Massachusetts requiring reporting and follow-up of patients treated for syphilis and gonorrhea had not been as great

an additional burden as he had anticipated because of the fact that the clinics that were treating these diseases had already an efficient follow-up system and trained medical-social workers assigned. The hospital had already assumed the responsibility now put on it officially by the state, in interest of efficient treatment of patients and protection of public health. Requirements of the law necessitated little more than adding extra clerical service for reporting cases. The workers with whom I have talked recently see several duties quite clearly. They can all be summed up in education. The Government's program asks the hospitals and dispensaries to instruct the patients. They can do their part effectively in no other way. This task may well be placed in the hands of the medical social worker. The question of how much the patient should know must be answered by the doctor, but, after that is determined and after an educational plan is decided upon, there must be endless and untiring personal work with the individuals who are going through the experience of facing the consequences of the infection, regardless of its source. And the mental adjustment is recognized as the biggest part of the problem, whether it be that of a wife who is striving to reinterpret her attitude toward her husband or the recalcitrant patient who must be made to submit to the law.

The hospital social workers generally regret the interpretation of the law as a punitive measure. They are finding instances of unscrupulous doctors who threaten patients with arrest if they do not return to them for treatment. All such misconstruction of the law can only be combatted by education. The public must know that syphilis and gonorrhea need treatment by specialists. Further legislation is needed to combat the drugstore evil. There must come a fuller appreciation of the necessity for thorough and prolonged treatment until cure is established.

On every hand we find evidence of the necessity for early education that will give young people a deeper understanding of themselves. It is almost too obvious to add that the installation of ideals in our youth—the greatest safeguard of all—is sorely lacking.

You hospital superintendents, superintendents of nurses' training schools, and we hospital social workers have here a joint problem. No one of us can carry the responsibility alone. Cooperation is essential.

Abstract of Discussion

MR. D. D. TEST, Philadelphia: I would be very glad indeed if Miss Cannon would tell us something about the handling in the hospital of vaginitis in the little girl and ophthalmia in the baby.

MISS CANNON: The care of the patient with vaginitis is one of the greatest problems I have ever had any contact with in the twelve years I have been a hospital social worker; primarily, because the doctors do not agree about the necessity for treatment or about when the patients are cured, and we always find ourselves wabbling when the doctors do not agree. We have not the hospital facilities for the care of these children. You have all known the tragedies that come from introducing into the wards a child that has vaginitis. I do not feel satisfied with what we have done. The effect of treatment on these little girls is a very serious thing; whether it is more serious than the effect of later treatment, I am not prepared to say. We have one worker assigned to the special job of looking after the babies with ophthalmia neonatorum. Only 50 percent of those are found to be of gonorrheal infection. We attempt in every instance to continue the breast feeding of the baby. The Massachusetts Charitable Eye and Ear Infirmary, where patients come from all over New England (only 45 percent from Boston) has been generous enough to admit mothers of those babies who

come from some distances and who could not otherwise give the babies breast feeding. They stay there during the time that the baby is having care. In cases in which the mother can not come, many times the infection develops before the mother is able to be up, and it is the job of the social worker, first of all, to get hold of the doctor and have him tell her not to dry up the breast, and to get a public health nurse, if possible, to send the milk by parcel post or at least to keep the breast active so that when the baby goes back she will be able to have breast feeding. We have in Massachusetts a law for reporting ophthalmia neonatorum. There is in these cases very close relationship with the Commission for the Blind, to which any case in which there is the slightest evidence of medical neglect is reported for investigation and prosecution. We are working very closely with the public health nurses on these cases, and it is a very significant thing that last year—we have about 125 babies a year—there was only one baby whose sight was practically gone, and that was brought in too late to save. There has been a very distinct decrease in the number of babies with defective sight, as a result of this vigorous follow-up and the efficient medical care which was given in a separate building from the rest of the hospital.

DR. R. J. WILSON, of New York: In regard to this care of vaginitis in the female infant, the easiest way, of course—I do not say the right way—is to keep it out of the hospitals entirely, so far as possible, by having a vaginal smear made in the admission room and excluding the case if the smear is found to contain the gonococcus. If the case must be admitted, as it must in certain kind of hospitals, especially those that take infectious diseases, four isolation rooms are required independent of the wards. Each isolation room is a little unit itself. When the case comes to the admission room, a smear is made. If that smear is positive and the child has a discharge, it is sent to a room taking care of acute gonorrheal vaginitis. If the case is found to have a discharge containing no gonococcus, the case must be sent to a room devoted to the care of acute, suppurative vaginitis of an origin unknown. If there is no vaginal discharge whatever but the gonococcus is present in the vaginal secretions, the case must be sent to a room devoted to the care of cases not of gonorrheal vaginitis, but to a room which, for the sake of argument, we will say is a room for carriers of gonococcus infection, because there is no acute discharge but there will be some time. Now, there is a large group of cases on which the diagnosis laboratory can return no positive report; they are always sent back as suspicious. You must have a room devoted to the care of suspicious cases until diagnosis can be established. Without those four rooms, separate and independent of your wards, there is no use attempting the care of vaginitis, because you can not take care of it in the right way. In a small hospital, however, where few cases are being admitted, you would not have, in the children's service, probably more than one case, and I would pick out a small room and devote one nurse to the care of one child.

DR. JOSEPH BYRNE, New York: Knowledge does not confer wisdom, nor does it insure right conduct. You must train your boy and your girl along the lines of spiritual improvement; you must train them to be good; and the only way to do that is by the practice of virtue. A practical thing to bring home to these boys and girls whom you are trying to teach is that no individual can ever enjoy liberty without proper subjection to law. That is the great principle. I would add that no person can ever attain to true happiness without reasonable repression of his interests. I am going to do an irregular thing by suggesting to you to read a book, "The Sex Problem and Marriage," by Professor Foerster, of one of the great universities in Switzerland. It is by a master mind, written in a masterly way. Get the book at the public library and read and digest it.

MR. DAVIS, Chairman: If we want social workers for this kind of work, can you tell me how we are going to get hold of them and what kind of people do we want to look for?

MISS CANNON: The only way to get a supply is to make a sufficient demand. The hospital social workers of the country have felt very keenly the necessity of standardizing our service and of increasing the number of properly trained hospital social workers. We have, therefore, organized a national organization, which is meeting at this time so that we might have these joint meetings

with you. One of our problems is this question of the proper training of the hospital social worker. At present there are several places where hospital social workers are trained, but there are a great many hospital social workers who are doing hospital social service who have not had proper training, because the demand has been so tremendous that people who have not been properly equipped and who know they have not been properly equipped have had to go in and do what they could; but it is for us, as a national association, to try to standardize that. There are in New York two courses that are being given, one at Teachers' College under the Department of Health and Nursing, to which only nurses are admitted, and one at the School of Philanthropy in New York, to which both social workers and nurses are admitted, and they have some medical education. We have in Boston a course at the Boston School for Social Workers. There is also a course being given in Philadelphia. There are several other schools where lectures are being given, but I do not know of any others where diplomas for hospital social workers are offered. There are, however, in our group of hospital social workers, many who have had social training and training in nursing, some who have had medical training, and others who have had scientific training in our colleges and then some social training and experience in dispensaries. We are a haphazard lot, not a standard article yet.

MR. TEST: I have been afraid that, in our endeavor for efficiency, we are thinking too much of cases and not enough of human beings. I feel that every one that applies to any hospital should feel that he or she is applying to a real friend in need. That spirit must preeminently radiate from our social workers.

MISS CANNON: I don't want you people to leave this room thinking that the social workers in the hospital are going to assume all the responsibility for the humanizing element in the hospital. We are not there for that purpose. We are there to bring a certain knowledge of the community that I think must necessarily be obscured to you, even if you have known something of social work, because you are living within four walls. It is for us to bring a knowledge and understanding and certainly a human interest, but we are not the ones who have to be responsible for all of that; and I do not want you to think that the American Association of Hospital Workers are going to have any monopoly of that human element in the hospital, or that we assume for a moment that it is our job and not yours, too.

DR. A. R. WARNER, Cleveland: I wish to second Miss Cannon's sentiments. It is high time that that thing was carried through to hospital superintendents, training school heads, managers and trustees. The hospital of today is a social institution, and the social service department is but an expression of what that hospital wants to do. Too often all the humanizing element has been left to the social service department, and there never was a social service department which could stand up under that burden or work with that handicap. There must be a united support in the humanizing life towards the whole hospital, or that social service department must be expected to fall.

THE PAY CLINIC AS A FINANCIAL ASSET*

These Clinics Make Money—"Organized Medicine" a Boon to Both the Medical Profession and the Community—

Attending Physicians Must Receive Adequate Pay

—Special Problems When Pay and Free

Clinics Are Held Together

The following discussion ought to interest us all—we are all looking for money, as Dr. Robert J. Wilson, chairman of the meeting, said, introducing the topic of successful pay clinics, and the following experiences undoubtedly will contain valuable suggestions both for those who think pay clinics can be made a financial asset and those who are convinced that it cannot be done.

DR. A. R. WARNER, Cleveland: Mr. Davis requested that I open this discussion because I had remarked to him that

*Discussion before the Out-Patient Section of the American Hospital Association at its Twentieth Annual Convention, Atlantic City, N. J., Sept. 24-28, 1918.

I couldn't make our pay clinic lose money; that I had tried cutting the charges for drugs and medicines down to a point where they couldn't be cut any more if we were still to say to the patient, "You are paying for your stuff." I am paying the physicians and everybody else now, I am sure, all they are earning, and still the clinic makes money. We are also paying an allowance for light—not heat, because the building has to be heated anyway—and making another fixed charge for incidental cleaning, janitor work, etc.

The thing that Mr. Davis wanted me to bring before you was the fact that the organized practice of medicine can be done at charges far below the individualistic type of general practice. A physician spends half he earns—if he is really good, more than half—right back in his practice for books and equipment of all kinds in order to give his patients the proper service. The organized practice of medicine does not need to figure on those things at all. All income is straight income. The physicians who work in it have no expense. A physician can properly afford to work in a clinic which furnishes all his supplies, all his instruments—everything, even his patients; he doesn't have to pay for transportation to them, it brings them to him; he doesn't have to pay any office rent, and he can work at a less price per hour than he can afford to do in private practice. The physicians of the country are not adequately paid, and it is extremely desirable from the social point of view that there be some means devised whereby physicians in private practice may be paid a sum which will enable them to give high quality service. They are not now. The organized practice of medicine, which is all an evening clinic is, can be run on a very much lower charge for the patient. The patients pay the entire cost. They are not on charity in any degree, and the greatest satisfaction that they can get out of the whole thing is the fact that they are paying their way. The payment to physicians can be adequate. At Lakeside we are paying five dollars for two hours' work. If the physicians stay over two hours they get more money. They often stay less, but we don't dock them for a few minutes. That arrangement amounts to this: If a physician should work seven hours a day at that rate—and a physician should work seven hours a day—then allowing a liberal allowance of half of his gross receipts which are swallowed up by his office expenses, automobile expenses, instruments, etc., that five dollars for two hours, two dollars and a half an hour, corresponds to a private practice income of \$10,500 a year, which is distinctly above the average. The patients in evening pay clinics pay on an average a fifty-cent fee. This fee does not cover the laboratory tests, the receipts for which are turned over to the hospital. They pay extra for supplies, up to five dollars, which is the usual charge for salvarsan, I believe. Now, those fees are furnishing in every pay clinic that I know more than enough money to run the clinic. It will soon get to a point where additional expense is compensated for completely by additional income. When you need to put on an additional doctor it is because of additional patients, and that means additional income. I don't know how large our clinic is going to grow. I don't care. The clinics pay their way, and the patients are the happiest and most satisfied patients that Lakeside Hospital serves. There is more or less kicking in all other places, but in the night clinic they all have a smile on their face.

I see no reason why any hospital, located in a district containing a number of workmen who are able to pay the doctor if he is needed at the house for a sick baby—and they should pay him if they call him—but who are not able to pay for a specialist's work or for the long, difficult

chronic work, cannot open an evening pay clinic with one doctor maybe, or maybe two, depending on how big a program it is wished to start. Whatever the size, the doctor must be fully capable of getting the proper results in the program which is laid out. If it is to be a venereal clinic only, which many of them are, then the doctor must be competent to treat syphilis, not by prescriptions to be taken by the mouth; he must be competent to treat gonorrhea—not just to give prescriptions for many things that are used, but really to treat it; he must be a man who knows something about the disease and one who will instill in the patient the proper attitude toward it. If you are starting a clinic and wish to include the nose, ear and throat, and the eye, see that your man is competent, and I cannot conceive of any difficulties. The patients will come. You will have a deficit until you get started and then—I can't make a deficit in ours. I do not know of any pay clinic that has been running six months that can. They are all on the right side of the ledger.

Now, this is a dangerous thing to bring about in one way, and in one way only. Your medical profession may say that you are in competition with them, but at this time when the physicians of the country are overworked, when there is a need for any and every means which can make it possible for them to care for the civil population better, the night clinic is not meeting with any amount of opposition from this source; you can get away with the proposition as you never could have done before.

MISS LUCY C. CATLIN: Last January in the dispensary of which I am executive director and also social service worker, we were desperate for the care and treatment of the venereal patients, and I was obliged to send them out on the streets in a highly infectious state, without any means of giving them treatment, for they had no money. Our specialist had gone. The matter was taken up with our social service board, who has the direction of the dispensary, and we started in the middle of January an evening pay clinic for venereal diseases. Some of the doctors said, "You are going to get into all kinds of trouble." It was up to me as social service worker to distinguish between the patient who could pay nothing and the one who could pay the full fee to the doctor, and to accept those who could pay a price which would cover the cost of treatment. In six months—a pretty good period over which to test a thing—we treated 250 cases. Remember, ours is a small dispensary—nothing like the one at Lakeside—and we had collected \$566. This covered all expenses and left a balance in the bank. We found a doctor who could give adequate attention to it, including the medical and social side as well, and paid him pro rata for the pay patients. We treated in this clinic free and pay patients.

Instead of finding trouble with the doctors, we have had the heartiest cooperation. We accepted and gave treatment to cases that were diagnosed in the hospital wards by our staff men as syphilis and referred to the evening clinic for treatment. I can't say, as Dr. Warner does, that we have never had a deficit; we have had in one month a deficit, but it was made up by the profit of the preceding months or the succeeding months. The first of September, we were so depleted in our medical staff that it was almost impossible to get doctors for our general day clinic. We said, "Can't we place our dispensary upon at least a part-pay basis?"

The superintendent said to me, "How much money have you in your evening clinic fund?"

I said, "I have enough to pay a doctor one month," and so we put into operation on the first of September, and

are now trying out a part-pay clinic, which is run by our diagnostician; he takes care of all the cases that come to the dispensary, with the privilege of referring the cases for special treatment to the doctors on service in the hospital who have those cases to take care of in the house. We find that with this arrangement we are able to give the service to the patients that they need. The dispensary is more needed now in our community than it has been for some time on account of the lack of medical men, and we feel that it is going to be a success.

Because of ignorance of the patients, because of the lack of doctors, and because of the need of the patients for adequate treatment, I admit to the dispensary patients who would under other conditions be able to go to a doctor and pay him. Then I say, "Can you pay 50 cents every time you come to the dispensary?" This is the day clinic, and we hope to collect half enough to pay for our doctor; the other half will come, and more, from the profits at our evening clinic. We feel that we have accomplished a two-fold purpose through the successful operation of our evening clinic because it has enabled us to put our day clinic upon a part-pay basis. At the evening clinic we charge \$5 for salvarsan, \$1.50 for mercurial injection, \$2 for Wassermann, and, if only the doctor's advice is given, \$1 and a little more than the cost of the medicine; this ranges from 25 cents to \$1 more than the cost of the ordinary prescription in the dispensary.

We pay the physician pro rata for the actual pay patients in the evening clinic. For the present we are paying him until we try it out at the rate of \$2 an hour for his work.

MR. J. R. HOWARD, New York City: Mr. Chairman, I think it is rather unfortunate to keep putting the word "profit" into this business, particularly in a new form of institution, about which there is a good deal of criticism by the medical profession. As a matter of fact, there isn't any profit in it. The overhead is not taken into account, and the heat—there is a small allowance for light, Dr. Warner says, but whether the cleaning, etc., is included or not hasn't been stated. I think if this form of institution is to grow that it ought to be absolutely on a business basis and that it shouldn't be said anywhere at any time that there is any profit in it until the whole cost is covered.

DR. R. J. WILSON, New York City: That is, you think the greatest profit should come to the patient.

MR. HOWARD: It should.

MISS MARY L. KEITH, Rochester, N. Y.: May I ask if the men and women are taken care of the same evening in the same clinic?

DR. WARNER: Very careful instructions have been given that they must treat every patient as a private patient, and no two patients are allowed in the room with the doctor at the same time under any conditions. They have to wait outside in the waiting room. They have the whole dispensary as a waiting room but in the doctor's office they are handled absolutely as private patients. A man may be in at one time and his wife may be the next patient in there, but they are not there together, and they use separate benches for the men and women.

MISS KEITH: But they do wait in the same waiting room? They do come the same evening?

DR. WARNER: Yes.

DR. R. I. WILSON: In regard to your clinic, Miss Catlin, do you receive both men and women the same day?

MISS CATLIN: We do, but as Dr. Warner says, only one patient is allowed in the treatment room at one time. We have a general waiting room, and there is always a

clerk there, and I am in and out all the time, and I know what is going on. No two are treated at the same time.

A MEMBER: Is this a war-time measure, or was this planned before the war? Dr. Warner intimated that there may possibly be some opposition to it on the part of the profession as being not altogether ethical or possibly as competition. We will admit that such a plan would act very nicely now with a shortage of physicians, but what was the attitude of the profession before the present shortage of physicians? Is this material used for teaching purposes?

DR. WARNER: Physicians have rights, but so has the community and so have the people. The average physician does not wish the case of gonorrhea or syphilis who cannot pay him the proper fees, and, therefore, these cases are being sent to our night clinic in large numbers. There is a class of physician who desires the case of syphilis that cannot pay the proper fees, but in the cases like this which have come to my attention the giving of improper treatment was still a profitable job because the worth of the treatment was considerably below what the man did actually pay. Now, my honest feeling is that in the development of a paid clinic which enables society to care for, say, twenty men, without making paupers of them, is contributing to the development of the medical profession—to the efficiency and to its cash in hand—far more than could possibly be contributed by allowing those twenty patients to go into twenty different offices and take up the time of twenty different doctors, paying them perhaps, and perhaps not paying them.

A MEMBER: Do students go in as hospital clerks or whatever you wish to call it, and spend a certain period of time in hospitals as clinical assistants?

DR. WARNER: Their entire time in the dispensary is spent in the day dispensary and not in the evening. I have employed some of our interns, or residents, to a certain extent, for special work in the night clinic. There is one on duty every night. He does nothing but give the salvarsan. The physician in charge does not do that; I pay the intern extra; sometimes we have employed an outside man for this work, but always a man who is competent, in my judgment, and he is always paid for it. The cases are sent in to the hospital just the same as from the day clinic. Any time that the university wishes to send men to our evening clinic they may do so.

MR. MICHAEL M. DAVIS, Boston: This morning in general session it was said that there was in some instances a falling off in dispensary attendance and in some instances an increase. I suppose that almost everybody here has had the experience of having physicians attending the dispensaries and not being paid for their services. Will the man take the interest in his dispensary that he ought to under these conditions? There is nothing that will so quickly run down a dispensary and nullify the work you have in mind to do as a physician who does not attend his dispensaries or attend his clinics. If we want to build up our dispensary work we must make it worth while for the physician to attend that dispensary. We can't expect men in these days to attend the dispensary without some compensation. Hospitals cannot pay the compensation out of their general funds at the present time, so it seems to me to resolve itself into a matter where proper charges must be made for that dispensary service. If we are going to charge for the dispensary service and are going to pay the physician for the service that he is giving there, what difference does it make whether the patient is financially able to pay or not? Because after all—I find it true in our particular district—

attending men are not going to be able to get around to all of the people who need medical care. More and more our dispensary is being visited by people who could well afford to have a physician come to the house; therefore, it seems to me that we must make a real and well worthwhile charge in our dispensaries. We should discriminate between those who are well able to pay, as Miss Catlin has so well pointed out, and those who are not so well able to pay, but all should pay a charge so that the attending man can be compensated for his services.

DR. JOSEPH B. HOWLAND, Boston: There are more ways than one of compensating a physician. I think we are distinctly coming to the time when we shall have to pay these men in dispensaries where there is no hope of advancement. If the out-patient department is part of a general hospital having a visiting physician in the house the physician who does his work well in the out-patient department may look forward to a reward in going up to the hospital, and that is just as valuable to a great many men as a few dollars. We have to think of compensation either in one way or the other. Men are not going to grind in the mill of the out-patient department without some distinct compensation.

MR. D. D. TEST, Philadelphia: Isn't it a fact that, as Dr. Warner said, the high-class ethical specialist doesn't want these cases and is very glad to have these paid clinics? The doctors who do want them are the men who are incompetent, the questionable specialists, the quacks, and it seems to me that therein lies a very important thought for us which bears out our contention that we should establish more and more of these clinics. The doctors who want these patients do not protect their patients or the community. Isn't it a part of our business as health administrators in our respective communities to try to lead these patients away from those doctors? We are not going to have any trouble with the ethical physicians.

Now, in regard to the pay clinics, we have what we call a salvarsan clinic, where we administer from fifty to seventy-five doses a week. We charge all the way from nothing to \$5. We don't allow anyone, man, woman, or child, to escape who needs the treatment and who does not have the money, but those who are able and willing to pay more, support that clinic and pay the social worker, and to my mind the social worker is the most important part of the whole thing. When people get careless, she follows them up. She writes postcards to them, asks them to come back for their treatment, and goes to see them. Her work results both in the benefit that we are giving to our patients and the fact that we are able to support this clinic; it is gratifying to the physicians and the surgeons, to the community as well as to the medical staff, to every one excepting, perhaps, those men who ought to be put out of business.

MR. HOWARD: I haven't heard until this meeting of combining a pay clinic with a free clinic, and I would like to ask the experience of some of the older pay clinics. Are these advisable or is it better to separate the pay clinic? Not only the clinic for venereal diseases, but any of the pay clinics?

MR. J. J. WEBER: I don't think that we have been faced with that problem, Mr. Chairman, in any very well-defined way; that is, we have not thus far faced the issue as to whether or not we shall have pay and free patients coming to the same clinic or whether we shall separate them. What is occurring in the Boston Dispensary, however, is this: We are having patients coming to our free clinic in the morning who, we find, through certain combinations of circumstances, can very well afford to come to the

evening clinic; so far as they can, we urge them to come to the pay evening clinic. On the other hand, very frequently patients come into our evening pay clinic because they are occupied during the day, who cannot afford to pay an evening price and whose fee we remit either in whole or in part; sometimes we make them a loan which they pay back in installments during the period of their treatment; but we have not yet faced the question of establishing any clinic where both free and paid patients are treated at the same time.

DR. WARNER: The same problem will arise in every dispensary. There will be patients who can not come—they are working nights now—and what are you going to do? For various other reasons they couldn't come nights, and finally we found that we had to face that problem so that now a certain number of patients who are not properly charged are referred from the day clinic to the night clinic, and a certain number of patients who can properly pay are referred from the night clinic to the day clinic when they can not properly be expected to attend evenings. The determination of which clinic they belong in fundamentally is made absolutely on the financial condition of the family, and that is settled by the social worker. The day clinic is free and the night clinic is a pay clinic. Sometimes we decide from the nature of the trouble that it is a simple thing which the family doctor can and should attend to, and we refer the patient to him; but if the patient has something that the family doctor can not be expected to handle properly he sends the man to us. Thus the relations between the family doctor and the clinic soon become very pleasant. We have had only one source of trouble. The charge for salvarsan in the evening clinic is \$5, and we have patients in the day clinic where the maximum charge is \$3; the night patients have learned that the day patients pay only \$3. Now, there have been several who have asked us if we could see any justice in that. They are perfectly willing to pay the 50-cent fee—they know they are pay patients and they pay cheerfully, and they pay for their medicines—but they do balk on that difference between \$5 and \$3. If the day patients were paying 50 cents for salvarsan, that would be all right; they would be all charity patients, and the night patients are not and they are proud of it, but they can't conceive of a \$3 fee for salvarsan as charity—that must be on some other basis and is simply an unfair discrimination.

DR. WILSON: Does the physician who examines and treats these patients know which patients pay and which do not?

DR. WARNER: That is on the card. They are two different clinics.

DR. WILSON: Well, I suppose that is necessary for the records, but to a physician sick people are patients—money doesn't enter into consideration at all—and why should he wish any knowledge concerning the question of whether they are pay patients or are not?

DR. WARNER: He doesn't need to know. He is paid for the service he renders.

MR. HOWARD: If the night clinic man is paid, what about the day clinic?

DR. WARNER: There are various ways of paying attendants. Our evening clinic has no connection with the university. It is purely a hospital matter. There is no promotion there, there is nothing but the work they do. They are paid proper fees for all they do. The day clinic is a part of the university, and the men all hold university appointments and they work for university preferment, which is ample payment and so regarded.

Blind Americans at Evergreen—Here They Are Taught to Read and Write, to Work and Play Again—The Red Cross Institute for the Blind Trains Assistants—The Government Will Help to Find Jobs for Them



Fig. 1. Evergreen General Hospital at Baltimore.

Evergreen is described as an institution with a "double function; first that of a hospital for the men while they are in need

Fig. 3. On the extensive lawns of this recreation field all kinds of outdoor sports may be enjoyed by the blind. The men are taught that systematic exercise is just as essential for the health of those who have lost their sight as for those who see.



Fig. 2. Headquarters of the Red Cross activities for the blind.

These men are taught to play as well as work. Dancing is the most popular pastime of all, though bowling, swimming (the

Fig. 4. Library and reading room. Through the agency of Braille the blind have recourse to many books which are supplied in the Red Cross Institute Building. The "Cheer-up" volumes in which are found extracts from current literature are much appreciated.



Fig. 5. One of the airy, restful wards where the men can feel the sunshine. Blind men are keenly susceptible to the charm of their surroundings, which is as quickly perceptible to their quickened senses as to the eyes of other men, a fact never lost sight of at Evergreen.

of medical care; and second, a school in which they are fitted to 'carry on' in the battle of life in spite of blindness." The advice of experts in the education of the civil blind has been sought, and under their supervision a class of volunteer assistants has been provided by the Red Cross Institute for the Blind.



Fig. 6. Through the lovely gardens of Evergreen the men delight to take their friends. This is the Elizabethan garden. The beauty of the place is important in winning the confidence of the soldier's family who sometimes hate to leave him in stranger's care.

sport in which their handicap counts for least) and many others are enthusiastically followed.

The first step in the rehabilitation is to teach the blind to use their fingers, and the hand-work courses include weaving, basketry, netting, chair caning, and carpentry. The men may not wish to follow these occu-



Fig. 7. Bowling—a favorite sport.



Fig. 8. The entrance hall serves also as a lounging room.

Fig. 9. Operating a small switchboard is one means of livelihood open to the blind, which men at Evergreen are taking up. This method has already been tried out with success in civilian life among the blind and partially blind, and promises to be a popular occupation.



Fig. 10. Carpenters' tools teach the men much about the usefulness of their hands, and, though none of them may expect actually to become carpenters, the training in the management of their fingers and the use of instruments which they receive will be invaluable.

pations for their livelihood, but the training which is given is invaluable.

Every man, too, is taught to use a typewriter, and, through the medium of stylus and Braille-writer, to write Braille as well as read it. These sub-



in the plant while he is actually engaged in his occupation. These pictures are the textbooks for Evergreen's "industrial" teachers.

The commercial world is probably the field most widely open to the blind, and there are being



Fig. 12. The swimming pool.

Fig. 11. (Above.) In the popular dance hall. No form of recreation is more generally enjoyed by the blind.

Fig. 14. (Below.) Puzzles for finger training and for fun.



Fig. 13. Exercise in the gymnasium. developed comprehensive courses in business economics, salesmanship, office management, the use of mechanical office equipment, and the principles of accounting and book-keeping.

jects are required. Among the elective professional courses are massage, piano tuning and bookbinding. All other occupational courses will be under the direction of the Federal Board

Fig. 15. Dictaphone operating useful to typewriters. It is obvious that for blind men, properly trained, the commercial world offers the most favorable opportunities, and a great deal of attention is being paid to preparing men for this line of work.



Fig. 16. Book-binding affords valuable finger training, and it is possible that some of the men may find an opportunity to follow this occupation for a living. It has long been a favorite means of occupying the blind who frequently become very proficient.

for Vocational Education, and cannot be undertaken until the required work is done.

Courses in industrial work are being planned. When an occupation seemingly suitable for the blind is found, a time-study motion picture is made of the most skilled man

Stress is laid upon the facts that "no trade is being considered where the economic advantages to both the employer and blind employee are not clearly manifest. In other words, efficiency is the watchword," and, with it these "brave blinded soldiers" move to victory.

THE SUPPLY OF PRACTICAL NURSES*

**A One Year's Training Course and Lower Standards of Admission Will Increase the Supply of Nurses—
Women Thus Trained Will Be Competent
to Handle All But Special Cases**

What's the matter with the trained nurse? A wave of harsh and resentful criticism of the professional nurse seems to be sweeping over the country. In spite of a recognition of her splendid achievement in remaking hospital nursing, and of setting up high standards for private nursing; in spite of her magnificent and sacrificial service in the great war, she is not now viewed by large numbers of physicians and laymen as a ministering angel of mercy or as an unmixed blessing. And when rebuked for these harsh expressions of disapproval, her unfeeling critics forcefully reply: "She is getting just what she deserves." What does it mean?

Is it because through high standards of admission to her schools, and long years of training before she is graduated, she has chosen to make herself one of a small body of the elect, a superior being? Is it because with the high cost of living and the scarcity of these chosen few she has, labor-union-like, demanded higher pay which only the well-to-do can give? Is it because in the home she is autocratic and unwilling to serve except in accordance with rules that she herself lays down, often demanding that service be rendered her and causing discord in the household management at a time of crisis? Is it because in many hospitals she has gradually acquired more influence and power until through her officials she speaks with authority even to the management, and dictatorially demands that before the interests of the medical staff are considered—sometimes even before the interests of the patients—there must be considered those of the nurses? Perhaps in this resentful criticism, narrow as it may be, the nurses are reaping what they have sown.

The war and the epidemic of influenza, with the consequent scarcity of nurses, have acutely drawn attention to the trained nurse and to the fact that she does not supply the suitable agent for ministering to the large body of the ill. The very poor may get free nursing in the hospitals or, if lucky, at their homes through charity; the rich can and will pay whatever may be demanded; but the large mass of people of moderate means, too self-respecting to accept charity, not able to pay the high price of the expert nurse, must be deprived of her services or secure them at what to these people is often a ruinous sacrifice. More than this: a nurse of the highly trained type is not necessary or even desirable in the vast majority of cases of illness.

What are the requirements of a capable, skilled nurse, a physician's assistant? First, a right personality; without this she is hopeless. Then intelligence, by which we mean a readiness of comprehension and understanding. Further, she should be of fair education, able to make herself understood, to write, to read, to reason. Lastly, she should have had training of sufficient length, probably one year, in a good hospital. This training should teach her the proper bed care of the ill, the preparation of food, the management of the patient—not his illness—and the methods of administering drugs and other remedial agents. She should learn enough of anatomy so that she will not, with her hypodermic syringe enter the brachial artery; she should know enough of symptomatology

to sense the possible significance of blood in the stool or of abdominal pain in typhoid; she should know enough pathology so that she will not wilfully violate the physician's orders against massaging a thrombosed femoral vein; she should have enough theoretical and practical training in bacteriology so that aseptic methods are to her, through her grasp of the reasons underlying them, methods to be scrupulously followed.

It goes without saying that other things—personality, native intelligence, etc.—being equal, the college or high school graduate will grasp these facts more readily and will, to this extent, be the more competent nurse. But such super-knowledge is not necessary. For 90 percent of cases of illness, a skilled nurse with the characteristics just enumerated and with one year's training will answer fully as well and will fit into the average household better. She will be a true physician's assistant and will be a household helper not too proud to assist in the kitchen or even to help care for the baby. If this is true, why should not this capable woman of ordinary but sufficient ability and training be allowed to practice her profession licensed by the state and earning an honorable livelihood?

There is a place for the highly trained nurse, the registered nurse of today. From their ranks will come the superintendents of the training schools of various grades, the head nurses in our hospitals, the nurses in our operating rooms, nurses for cases of special severity or complication, and the teachers of nurses. Let the training schools preserve their high ideals, though there may be question as to the necessity or wisdom of requiring even a high school degree for admission or a three years' course of training except in special cases or for postgraduate work. For her own good let the nurse be a little less autocratic, a little less dictatorial, a little more human. *Non ministrari sed ministrare* is as good a motto for a training school as for a woman's college. The trained nurse from having been a luxury has become a public necessity, like the telephone and railroad. Should not methods less like those of selfish private ownership give way to those wherein service to the sick public is the paramount aim?

Five Practical Economies

Conservation is something of a science at the New Jersey State Hospital, Greystone Park. It takes a scientist to see a source of revenue in a few bits of paper and dead leaves blowing about, an empty packing box, a few old rags, and a broken broom in the corner, yet how this revenue was realized is told in a recent issue of *The Psychogram*, which is published once a month in the print shop of the hospital where all the typographic work is done by patients.

Two immense baling presses, evolved by a patient with a mechanical turn of mind, make all the waste paper gathered from the premises into bales which are sold at the rate of forty tons a year.

Dead leaves are given to the swine, and pass through two stages of usefulness: first, as an excellent litter for the pigs, and second, as capital fertilizer for the soil.

Empty boxes are broken up, and the wood made into the backs of brushes—enough to supply the local demand and leave a considerable surplus for traffic.

New brooms are fitted to old broom handles by the patients, and here a considerable saving is effected by the hospital.

A textile department takes care of old rugs; they are cut into strips and made into carpets and all sorts of rugs, some very pretty, all useful.

*Editorial from the Journal of the American Medical Association, January 25, 1919. See reply in the Department of Nursing of this issue of THE MODERN HOSPITAL, page 209.



Conducted by ANNIE W. GOODRICH, Dean Army School of Nursing
and CAROLYN E. GRAY, R.N.

Please address items of news and inquiries regarding Department of
Nursing to CAROLYN E. GRAY, R.N., Principal, City Hospital School
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AS OTHERS SEE US

**Nurses Are Not Too Highly Trained—Hospitals Require
Long Periods of Training for Their Own as Well as
Nurse's Benefit—Nurses' Cooperative Social Work
Requires Educational Background—Nursing
Is a Profession in Itself and Deserves
Professional Respect and Pay**

The writer of a recent editorial in the *Journal of the American Medical Association*¹ refers to a "wave of harsh and resentful criticism of the professional nurse [which] seems to be sweeping the country," acknowledges "her splendid achievement in remaking hospital nursing and setting up high standards for private nursing," speaks of "her magnificent and sacrificial service in the great war," and yet goes on to state that in spite of this "she is not now viewed by large numbers of physicians and laymen as a ministering angel of mercy or as an unmixed blessing." He further tells us what is wrong with nurses in general, and what he deems to be the proper training for nurses to qualify them for the approval of the physician and the general public.

First of all, we are too highly educated. Our "high standards of admission" and "long years of training" have produced "a small body of the elect." Those of us who have struggled for many years to raise our standards of admission and who realize that lack of preliminary education has been one of our most serious stumbling blocks can not agree with this assumption. A study of the laws affecting schools of nursing will show that the standards of admission are woefully low. Having been a member of a state board of nurse examiners, I can only testify sadly that, in one state at least, a much higher standard is most desirable.

The requirements of the ideal nurse of our critic—one who shall be "a capable, skilled nurse, a physician's assistant"—are first, "a right personality, a readiness of comprehension and understanding, fair education." She must be "able to make herself understood, to write, to read, to reason." In addition to these qualifications, the writer would give her "a year's training in a good hospital."

She does not need the "super-knowledge" gained in high school or college. Yet after all, is it not rather a well-educated young woman who has been sketched? To be "able to reason" implies a good deal, as does "a right personality" and "readiness of comprehension." The only motive for setting a minimum educational standard for

entrance to schools of nursing is to make sure that our applicants will have some of these qualities. The writer can not be very familiar with the finished product of our high schools if he thinks that the average high school graduate would measure up to his requirements. I am confident that many nursing schools would welcome large groups of women such as our critic describes, if only they were available; if any better way to judge of their fitness than by an educational standard can be devised, it will be equally welcome. Possibly the psychologists, with their various tests for vocational fitness, might be able to help us out in this dilemma, but these tests are expensive and would probably increase the training school budget. How well we know that the greatest crime a training school superintendent can possibly commit, is to increase her budget!

Many are beginning to feel that the long years of training (as well as the long hours on duty) can be reduced with no loss to the student nurse. In all too many instances the hospital and *not* the nurse benefits by the third year of training. Almost all hospitals dependent on nursing schools plan for a minimum number of graduates and a maximum number of pupils. Three years of training makes this possible, as only one-third of the pupils graduate each year. A shorter course of two years means that one-half the pupils graduate each year, and a course of one year would mean a complete change of pupils each year. Moreover, a decrease in the total length of training would be accompanied by a proportionate decrease in the length of time spent in each department, and an increase in the number of changes of personnel, to say nothing of the increased number of graduates who would be necessary to provide adequate supervision and give some degree of stability. Is there anything more calculated to rouse the ire of everyone connected with the hospital, from the head surgeon or physician to the friends of the poorest patient, than frequent changes of nurses? We are familiar now with the complaint that the changes are altogether too frequent even with a three years' course.

Any decrease in the length of training also calls for an increase in the number of applicants. We hear much of the shortage of applicants now. Would a shorter course attract a sufficient number to offset this?

In our experience the scarcity of physicians has been much more marked than the scarcity of nurses, particularly in regard to those rendering medical care to the poor, the great mass of our population. Why is it that the scarcity of physicians has been taken as an inevitable result of war conditions, while the shortage of nurses is laid at the door of the nursing schools? The remedy suggested is to overthrow our present system and substitute the familiar short course. To produce a large number of insufficiently trained nurses to meet this shortage is a temptation, but why overthrow machinery of which the product on the whole has been good? We hear nothing of the royal road to medicine via a short course, nor the plea that the "high standards of admission" are the cause of the shortage of physicians.

Secondly, it is stated that nurses, "labor-union-like," have demanded higher pay because of the "high cost of living and the scarcity of the chosen few." It seems perfectly reasonable that a nurse's pay should be advanced to meet the high cost of living. How else may she live? I believe it is also an economic law that prices are regulated by the supply and demand. During the epidemic, some nurses have charged \$7.50, \$10 or \$12 a day to the rich, but what of the many who visited the poor and the families of moderate homes, who made as many visits as

¹Editorial, "The Supply of Practical Nurses," January 25, 1919. The editorial is reprinted on page 208 of this issue.

the length of the day and the nature of their work permitted? These nurses receive the munificent compensation of \$75 to \$100 a month, out of which they must meet all their expenses. In New York the nursing organizations pooled their forces, and a Nurses' Emergency Council was organized to coordinate the nursing work. This was not true of the work of the physicians, five or six of whom made calls in a single tenement house in a period of three hours, while many sick persons in the same building were unable to secure medical attention. Our daily papers told us of poor mothers who swarmed about the automobiles of the doctors, begging them to visit their children. My tailor told me of his son, a physician, who made from forty to fifty visits a day during the epidemic. Would he have considered even the daily wage of the nurse-profiteer (\$10 a day) a recompense for the danger to which she, far more than he, was subjected?

Thirdly, the nurse is "autocratic and unwilling to serve; demands personal service and causes discord in the household at a time of crisis." We are trying hard to break down the system of military discipline which still prevails to a large extent in our hospitals. Train a young woman (or man) in an autocratic atmosphere and you will produce either an autocrat or an extreme radical. The latter are not usually found in the ranks of private-duty nurses, and the writer evidently refers to the so-called "luxury nurse." She enters the household at a time of unusual distress, encounters servants who are terrified by sickness, especially if it is of a communicable nature, and who needs unusual tact to bring harmony out of such conditions. It hardly seems that less education or even shorter hospital training would remedy this.

Fourthly,—and here enters a note of personal grievance—the writer says, "In many hospitals she has gradually acquired more influence and power until through her officials she speaks with authority even to the management, and dictatorially demands that before the interests of the medical staff are considered, sometimes even before the interests of the patients, there must be considered those of the nurses."

Now again, why not? I was once speaking with a member of the board of trustees of one of our largest hospitals when the superintendent of nurses was referred to. I commented on the cooperation of the medical superintendent of that institution with the superintendent of the training school, and the member of the board replied, "But, of course, Dr. Blank recognizes that her position is equal to his own."

What the writer of the article under discussion does not seem to realize is the fact that nursing is of itself a profession, separate from medicine, though closely allied to it. Nursing has developed through nurses, always.

Our nurses in training pay and pay dearly for their nursing education by long hours of arduous work. Why should they not be considered and their needs recognized? It is a long time since Florence Nightingale established the first school of nursing and made the work attractive to educated women. Ever since, our "greatest foes have been those of our own household." Not all, but many physicians have cried out against the "over-trained nurse." And yet when these same physicians seek a woman for a particularly difficult position, it is to the so-called "over-trained" nurse that they turn.

Now we hear of "super-knowledge" in reference to the college or even the high school graduate. The popular nurse should be willing to "assist in the kitchen" or "help care for the baby." There is a very general demand for just such a group of women and many visiting nurse associations are adding houseworkers to their lists. We wish

to call our critic's attention to the fact that nurses are not only willing that practical nurses be "licensed by the state," but that in New York State they are sponsoring a bill for just that purpose. A few hospitals stand ready to train attendants if only the applicants would appear. The Y. W. C. A. and the Red Cross give excellent courses in home nursing.

The spirit of the times is away from the traditional family doctor and family nurse. This our friend touches upon in his closing paragraph, to which we give hearty assent. By all means, let us have the socialization of the nurse. Tradition has led her footsteps into the familiar path of private duty, but she is learning the newer and infinitely more satisfying way of community service. When the socialization of the physician has progressed as far as that of the nurse, he will have a broader conception of her usefulness than he has today, and will then realize that she needs the most liberal education and training to fit her for her profession—a profession which is separate and distinct from his own, although the two are mutually dependent.

* * * *

OCCUPATIONAL THERAPY AND THE TRAINED NURSE*

Ward Occupations, Curative Workshops, and Reeducation Schools Are Three Consecutive Steps—Special Training Essential for Occupational Nurse

By ELIZABETH G. UPHAM, Advisor in Occupational Therapy, Milwaukee-Downer College, Milwaukee.

So great has been the progress in hospitalization in the past years that it would seem as if no phase of hospital activity which could contribute to human welfare has been neglected, and yet the great war has every day shown that more is needed, if nursing and surgery are to restore the victims of war to usefulness and independence.

How may the great miracle of reclamation be brought about? What is needed besides nursing and medicine to convert broken and wasted men into useful and happy citizens? The answer is training. But it is not enough to delay the training until the patient is able to attend a reeducational school. Every country has learned that it is too late to start training after the men are dismissed from the hospital. The long days of convalescence have taught them the habit of idleness. They will not readjust themselves. They are apt to take one of the two attitudes, "I have done my bit" or "I am no good." Thus it was found that if the men were to be trained they must be given occupation early in hospital life, before the habit of idleness has formed. Occupation teaches them that they still have another bit to do, and that they are useful.

The process of rehabilitation has three distinct stages: first, the ward occupations, at which stage the patient makes first efforts to use his hands and mind while he is still in bed or unable to leave the ward; second, the curative workshop training, when the patient is able to be about and take definite exercise, and to work for stated periods each day; third, the reeducation school, to which the patient goes after discharge from the hospital.

These three steps should be made links in a consecutive system which leads the disabled man from his first efforts in the ward through training to a permanent calling. Thus the occupation should be made to be useful to the patient from the very first, and to fit him for his future vocation. In the ward a typewriter, besides exercising stiffened fingers, can prepare a man for a business course. Metal crafts can initiate another into mechanics at the

*Read before the Convention of Wisconsin Trained Nurses, Milwaukee, October 1 and 2, 1918.

same time they are affording him diversion and exercise, and a future foreman can begin his training by learning mechanical drawing in bed. The workshops and reeducational schools carry on the courses thus begun in the ward.

Ward occupation, or that phase of reeducation which begins in the hospital, is of particular interest to the nurse. Occupation at this time is more than educational—it is therapeutical; hence its name, "occupational therapy," the science of healing by an occupation. The thought of occupational therapy is not new to the nurse. She has known that contentment and optimism have helped many a patient to recovery, just as discouragement and fretfulness have impeded the progress of others. With the limited resources at her command, she has tried to entertain, amuse, and occupy her patients. She has read aloud, played games, cut out pictures for children, and found fancy-work for women. She has found it more difficult to find occupation for sick men.

While the knowledge that occupation in the wards is a science of actual therapeutic and educational value has been an outgrowth of the war just as much as the great advance in surgery, orthopedics, and the care of infection, its usefulness is by no means confined to military hospitals. It is more and more being considered as much a part of the routine of civilian hospitals as massage, hydrotherapy, and electrotherapy. The doctor frequently gives a work prescription.

An actual technic has developed in the directing of ward occupations, for occupation is no longer looked upon as negatively time-killing and left to the ingenuity of the teacher. The patient is studied, and his mental and physical abnormalities noted. The occupation is then selected which will tend to normalize the mental complications and produce the desired exercise for the physical limitations. This occupation is in the hands of one especially trained and skilled in its administration.

Among the mental complications commonly seen are ennui, melancholia, discouragement, fear, morbid introspection, restlessness, elation, and excitement. It is obvious that these different mental states cannot be treated by the same occupation any more than by the same drug. An occupation with a stimulating reaction must be given to the patient affected with ennui. The patient with melancholia is particularly liable to fatigue, and must have simple, cheerful work. The discouraged must be given tasks that he can readily master, and whose accomplishment brings about self-confidence. The introspective, apprehensive, or depressed patient must have an occupation demanding considerable concentration in order to keep his mind from brooding and fears. An occupation of a sedative and relaxing type will reduce restlessness and nervousness.

The mechanism of mental recovery by occupation is simple. Only one idea can occupy the patient's attention at a time. The content of that idea is the first responsibility of the occupational therapist. Every idea or sensation has a natural desire to express itself, and the direction of that expression is her second duty. In healthy minds, volition precedes action, and disordered minds may be normalized if volition can be born, and action and decision made clear and enforced. Volition may be helped by the selection of the right occupation; and the patient's least thought, desire, or idea must be the starting point. By careful direction, action follows, and fatigue, doubt, indecision, or lack of interest must not be allowed to prevent its logical execution. The mental poise, control, optimism, and activity thus acquired react favorably upon the entire body, and facilitate recovery by inducing sleep and assimilation. These, in turn, assist in such functions

of life as nourishment, production of digestive juices, and the cycle of metabolism.

Physical recovery is measured by growing muscular power, coordination, and resistance to fatigue. These can not be acquired suddenly, but are best developed by carefully graduated activity. Finger, hand, arm and shoulder movements may all be developed in bed. Each of these is dependent upon the occupation selected. Thus typewriting, metal carving, and fine raffia work may develop skill and exercise the fingers. A tint loom whose shuttle must actually be woven in and out produces wrist movements, while drawing, metal sawing, or throwing the shuttle on large bed looms exercises the arms, and large reed baskets require shoulder movements.

Occupational therapy and active exercise are taking the place of mechanotherapeutics and passive exercises as soon as the patient is able to initiate movement. In all countries purposeful exercise has been found the expedient way to cure weakened muscles and stiffened joints.

Occupation is invaluable as a therapeutic agent in all cases of long convalescence. Dr. Frederick Brush says of his occupational treatment of convalescents at the Burke Foundation: "One soon learns that convalescence at best is fully half mental. Our occupation is considered not chiefly diversional, but remedial, reconstructive, curative, convalescent, normalizing. It is not a side issue; it costs; it is our best medicine. It is prescribed, in writing, for more than one-fourth cardiacs, hyperthyroids, choreics, all the border mental and nerve folks, the inherently restless, all long stayers, the temperamentally difficult, the quitters, the pampered, the disheartened."

In order to make occupation therapeutic in its fullest sense, and educational in preparing the patient for his wage-earning vocation, it is necessary that it be directed by those especially trained for this service. There are several schools preparing women for this profession. The school provides a medical background for the student, supervises her contact with the patients, and trains her in a large variety of crafts and occupations. The training course covers a period varying from three months to four years, depending upon the student's entrance qualifications, her knowledge of medicine, crafts, occupations, educational subjects, and her teaching experience. A fundamental point in the training of occupational aides is that they must have judgment in the selection of the occupation, and in the method of developing it; and if it is begun as a diversion, they must know when to convert it into a purposeful occupation which develops regular habits of work.

Ward occupations should not be judged alone by the quantity and quality of output. Their merit in the hospital lies chiefly in their therapeutic values, and they must be considered primarily as they improve the patient's mental and physical condition. The teacher of ward occupations must have vision in order to make the instruction of permanent value to the patient. Convalescence, instead of being a long, irksome period, may be made productive and of lasting value if the patient leaves the hospital not only cured, but with new resources, steady mental habits, the purpose to work, and education to advance his position.

The trained nurse has a definite relation to this service. She comes in close contact with ward occupations. She sees the patient before and after his treatments, she charts his physical condition. While the doctor must be the one to determine the effect of the occupation and give the instructions, the cooperation and undertaking of the nurse is essential for the best results. There must be a spirit

of mutual good will and understanding between the nurses and the aides. On the one hand, occupational therapy must not be looked upon by the nurse as an intrusion, an unnecessary and wilful means of littering up her tidy wards. It is not a fad. Its value as a therapeutic agent and as a means of inspiring the patients has been tried and proved. On the other hand, the occupational aide must not impose upon the indulgence of the nurse, but take every care to fit smoothly into the legitimate and established routine of the ward.

There has grown a new conception of the service of the hospital to its community. No longer will it be content to pass heedlessly out of its doors those who are through with treatment. Its occupational therapy, social service, and out-patient departments have all been working with the medical, nursing, and administrative staff, not only to make possible physical cure, but to direct that cure to a worth while end. The hospital should be looked upon as a great training school not only for its doctors and nurses, but for its patients, and for the community it serves. The patient should leave the hospital with a knowledge of personal hygiene and of public health and responsibility. He should be better able to take care of himself, and more helpful to others for his hospital experience. He should be animated by a new purpose and desire to live and serve, and, if convalescence has been long, he should take with him new resources, new interests, and better educational equipment with which to earn his living.

"The time has come when prevention of diseases looms larger than the cure; and in this field the hospital must show the way again by the aid of the sciences and the arts, directed along the lines of hygiene, sanitation, pure living, and right thinking."

This can be accomplished only as each department within the hospital works in cooperation with every other. It can be accomplished only as each individual appreciates the work of others, is conscientious in her own work, and feels herself a part of the big vision and ideal.

It is for this reason that the appreciation and understanding of occupational therapy on the part of the nurse is necessary. The private nurse who has not these hospital contacts to aid her has to have all these resources within herself, and as she understands the value of occupation she has a new means with which she may serve her patients.

* * * *

A Valuable Textbook on Home Care of the Sick

The American Red Cross textbook on "Home Hygiene and the Care of the Sick" has been entirely revised and rewritten by a no less able authority than Miss Anne Hervey Strong, R.N., professor of Public Health Nursing at Simmons College, Boston.

It is of particular interest that this book, originally prepared by foremost women in the training school world, should now represent the additional experience of one whose "hospital" is the community and whose acquaintance, therefore, with the home need is intimate and constant.

Examining this book, one is soon made aware of the fact that although its purpose is definitely to enable the homemaker to give intelligent care to the members of her family when highly trained assistance is unavailable, its subject matter is scientifically correct. In fact, much of it could be used to advantage in our schools of nursing, particularly the reviews, given at the close of the chapters and at the end of the book.

The bibliographies following each chapter are exceptionally good.

The chapter on "Causes and Prevention of Sickness," brings out clearly that prevention is the slogan of today—that "we serve best by preventing sickness." Non-communicable diseases are shown to be of even greater importance to the public health worker than the large group of communicable diseases—and this because, while in the latter group there has been a marked falling off in the last forty years, the first group has a death-rate which is actually increasing.

How many know that premature old age occurs among "a vast number of people, in various classes of society and various occupations—that the vital organs show a marked tendency to break down after the age of forty-five?"

Miss Strong shows that this is not inevitable and that degenerative changes can be checked or prevented to a large extent, and she states plainly their causes. The first can be summed up in one word, poverty, or possibly its reverse, wealth. "Conditions of life which result in continued overwork, and mental overwork, in particular; worry, excitement, insufficient recreation, and exercise, and other kinds of nervous strain typical of modern life." The second class of causes of premature decay are "irritating substances in the body," which may result from infectious diseases, occupational poisons, improper eating, etc.

The value of periodic examinations of adults, as well as of children, is emphasized, and the chapter ends with the responsibility of the mother to teach correct hygienic habits and thus prevent many cases of degenerative as well as of communicable diseases.

Many old superstitions are exposed and fumigation is discussed from the modern scientific viewpoint. Satisfactory sterilization is described.

This book will be of great value in the education of the public, and it should not be neglected in our schools, lest our trained nurses find themselves in the position of learners when they go into up-to-date homes.

American Red Cross Textbook on Home Hygiene and Care of the Sick. By Jane A. Delano, R.N., Chairman of the National Committee, Red Cross Nursing Service; Director Department of Nursing, American Red Cross; and late superintendent of the Nurse Corps, U.S.A. Paper, pp. 318, 34 illustrations, 60 cents. P. Blakiston's Son & Co., Philadelphia, 1918.

* * * *

Meeting of Nursing Organizations in New York

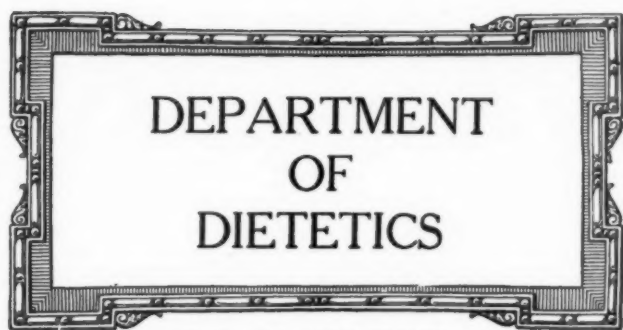
Meetings of the directors and committees of the American Nurses' Association, of the directors and committees of the National League of Nursing Education, and of the board of directors of the *American Journal of Nursing* were held in New York, January 15 to 18, 1919.

The stockholders of the *American Journal of Nursing* accepted with regret the resignation of Miss Clara D. Noyes, president of the board of directors, who felt unable to occupy this position in addition to her position as president of the American Nurses' Association. Miss Sarah E. Sly of Michigan was chosen president of the board, and Miss Anna C. Jamme was appointed a member.

It is regretted that, owing to lack of funds, the work of the interstate secretary will be discontinued late in the summer when the present term is ended.

As many other scholarships are available for public health nurses, it was voted to award most of the Robb scholarships to applicants who wish to prepare themselves for teaching or for executive positions in the training schools.

¹ "Salutatory," THE MODERN HOSPITAL, September, 1913, I, 32.



Conducted by LULU GRAVES

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

DEPARTMENT OF DIETETICS IN THE UNIVERSITY OF MINNESOTA HOSPITAL

Valuable Experiences in Diet Laboratory for Student Dietitians and Student Nurses—Course Includes Sixteen Hours of Theory, Forty-Eight of Practical Work, and a Six-Hour Course on Diets in Disease

By GERTRUDE THOMAS, Head of the Department of Dietetics, University of Minnesota, Minneapolis

The dietitian has charge of the "food interests" and the household management of the hospital. Under the former comes planning and ordering the food for all meals served in the hospital; supervising the preparation and service; teaching classes in both theoretical and practical dietetics for student nurses, an occasional course for medical students and, during the past year, classes of hospital corpsmen for the navy.

Under household management comes the employment and management of employees, supervision of the house-keeping of hospital and nurses' dormitories, and supervision of laundry.

There are two student dietitians who come for a period of four months. The first two months are spent in the diet laboratory preparing and calculating the special diets, and the last two in the dietitian's office for experience in hospital management.

The experience in the diet laboratory is valuable to both the student dietitian and the student nurse. They exchange ideas, and while the student dietitian, who is usually a recent graduate from some school of domestic science, is absorbing hospital ethics and becoming accustomed to hospital routine, she is giving the student nurse the benefit of her knowledge of cookery and reaching her from a different angle than the instructor has. In addition to this, the fact that the special diets are being worked out for real patients and not as problems lends a vital interest to the work; these people follow their patients closely to watch the effect of the dietetic treatment, which in some disorders is the most powerful weapon that can be wielded.

The Joslin-Allen treatment of diabetes is used, the Sippy diet for gastric ulcer, and other routine diets such as low protein, cardiac, constipation, etc., besides the various test meals.

The diet laboratory is responsible for only the special diets. The food for the remainder of the trays is sent from the general kitchen to the diet kitchens on the floors. The head nurse on each floor arranges for one student nurse to take charge of the sending out of the trays. This is done according to a chart which indicates the character of the patient's diet.

The cards with the patient's name and the card indi-

cating the type of diet are fastened in with clips so that they are easily changed. This system does away with confusion at tray time, and the trays go out very quickly. The dietitian makes rounds at tray time of both the diet kitchens and wards.

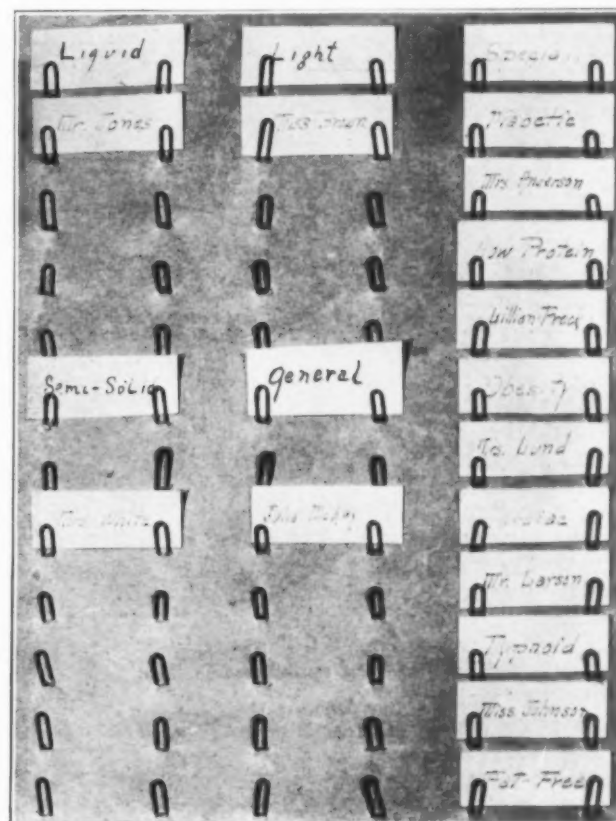
All menus are planned by the dietitian and the food ordered each morning. The purchasing agent of the university makes arrangements with various firms to supply all dining rooms on the campus for certain periods of time; so the dietitian has only to place the daily order for meat with the cold storage department and for milk and bread with some firm indicated, while the hospital steward orders canned and staple goods from the main university store house and fresh fruit and green vegetables from the wholesale house. The steward has charge of a small store room.

The course in dietetics for the nurses is covered by sixteen hours of theory, which they take while they are preliminary students in the university. Following this, forty-eight hours of practical work is given when these students enter the hospital as probationers. Added to these classes, which are held by the dietitian, are six hours on Diet in Disease, given by one of the doctors who is especially interested in this subject.

An outline of the work covered is as follows:

THEORETICAL DIETETICS

1. Definition of Dietetics, Food, Food Adjuncts, Conditions for Perfect Nutrition, Composition of the Body, Composition of Food, Classification of Food According to Five Food Principles, Heat and Energy Metabolism.
2. Digestion. The Four Processes by Which the Body Makes Use of Food.
3. Water. Occurrence in Body, Use in Body, Amount Required by Body, Dietetic Uses of Water, Kinds and Sources of Water, Purity, Care of Water in the House.
4. Mineral Salts. Occurrence in Body, Use in Body, Forms in Which Found, Sources in Food, Dietetic Uses of Minerals.



This simple, home-made chart keeps track of the special diets, etc. The little white cards are slipped in behind clips inserted in brown paper with a linen backing. The "guide" cards, General, Light, Liquid, and Semi-Solid are yellow, blue, red, and green respectively.

5. Carbohydrates. Definition, Sources, Classification, Study of Each Group of Carbohydrates, Sugar, Sugar Substitutes, Starch and Cellulose, Vegetable Foods, Classification, Cookery of Starch, Cereals and Vegetables.

6. Fats and Oils, Forms of Fat Used, Uses of Fat to the Body, Digestion, Saponification, Dietetic Uses.

7. Proteins, Composition, Sources, Forms, Tests for Protein, Characteristics, Fermentation, Uses to the Body, Dietetic Uses, Digestion.

8-9-10. The Caloric Value of Food, Amount of Heat Produced by Various Foods, Daily Caloric Requirement for the Individual, Factors Controlling the Caloric Requirement, The Balanced Ration, Weights and Rations of Food, Table of Caloric Values.

11. Diet in Health, Diet as Adapted to the Various Periods of Life.

12. Classification of Hospital Diet, The Convalescent Tray.

13. Preservation of Food.

14. Trip to Flour Mill.

15. Trip to Meat Market.

16. Review.

PRACTICAL DIETETICS

1. Preparation of Food, Methods of Cooking, Care of Food, Food as a Vehicle of Infection, Care of Utensils, Sink and Refrigerator, Beverages.

2. Cream Sauce Preparations.

3. Eggs.

4. Cream Soups.

5. Milk.

6. Cereals.

7. Vegetables.

8. Service of Fruits.

9. Study of Fats—Bacon, Chocolate, etc.

10. Gelatine.

11. Salads.

12. Frozen Mixtures.

13. Desserts.

14. Breads.

15. Lesson on Menu-Writing.

16. Cake.

17. Fish.

18. Cookery of Small Cuts of Meat.

19. Cookery of Large Cuts of Meat.

20. Fowl—Squab.

21. Table Setting, Service of a Meal.

22. Diabetic Cookery.

23. Review.

24. Demonstration.

In the course for the hospital corpsmen for the navy, the aim is to give a course sufficiently practical to enable them to prepare simple trays for their patients in "sick bay," with some theory to establish general rules for the preparation and selection of food for the sick. This is given in six classes of one and one-half hours each. The first class period is devoted to theory entirely. A general introduction to the subject is given touching on some of the problems which enter into the dietary in disease. The second lesson acquaints the men with the "mess gear" of the laboratory, and some work in liquid diet is done. This is continued in the third lesson; in the fourth, semisolids are prepared; light diets are studied in the fifth, and a general tray in the sixth.

The corpsmen seem to enjoy the work (after the first lesson) and take hold very well. Many amusing questions are asked. During a written lesson the question, "What is the effect of heat on CHO?" was written on the board. After a puzzled pause one ventured to inquire, "Haven't you forgotten the W?" chow being a more friendly term to a sailor than carbohydrates. It takes considerable drill to bring out the importance of service. To repeated suggestions that service impairs or enhances the esthetic value of food, the sailor boy answers, "Well, he's in the navy now," which seems to be sufficient reason for serving the sherbet in the freezer, the coffee in a measuring cup, or a coddled egg in a double boiler. However, as the work goes on, a regard for the niceties of service is developed, and when the course is complete the imaginary patients are receiving perfect service.

The course for the medical students is an elective in the medical school, and the number of students selecting this work is steadily increasing. The classes are two and one-half hours long, one of the doctors in the medical school holding an hour of theory after which the dietitian takes the class for the remainder of the time for practical work. The theoretical work deals with the general principles governing the dietary in both health and disease, while the practical work covers selection, preparation and service of simple foods.

The classes in practical dietetics are held in a class-

room apart from the diet laboratory. This arrangement was necessary, owing to the fact that classes and trays were found to conflict. This makes it possible to hold classes regardless of the service of trays and is a much more satisfactory arrangement.

DISHWASHING IN RELATION TO THE TRANSFER OF DISEASE

Experiments Show the Importance of Soap and Boiling Water—Bacteria Survive for Many Hours.

By RENA S. ECKMAN, M.A., Teachers College, Columbia University, New York City

The question of dishwashing in small institutions, cafeterias, ice cream parlors, and soda fountains, where dishwashing machines and a plentiful supply of boiling water are not always available, often causes uneasiness to the onlooker. Such places might readily be considered foci for the spread of disease, should a carrier of one or more of the mouth-borne infections seek refreshment there and leave dangerous germs on the dishes and silver. Even large institutions often have the silver, glassware, and fine china washed by hand.

It seemed worth while to make some tests of the survival of bacteria when subjected to different methods of dishwashing.

The plan was (1) to put a smear of a known organism on the dishes; (2) to wash the dishes by several different methods; (3) to swab the infected area after washing; and (4) to cultivate the possible organisms obtained in order to get back the same variety of bacteria used in the original smear.

To reduce the amount of work, an organism was selected the presence of which could be demonstrated without the use of the microscope. *Bacillus prodigiosus*, a non-pathogenic bacillus, fulfills this requirement, as it produces red pigment while growing. It is not commonly found on food. If, after the dishes were washed, the survival of this organism could be demonstrated, the meaning would be plain and the mode of dishwashing judged ineffective and therefore dangerous to the health of the public.

A broth culture of the organism, *Bacillus prodigiosus*, was used. Swabs were made by winding a little cotton around the point of a slender stick. Each swab was put into an empty test tube, the tube plugged with cotton, and the whole collection sterilized. A swab was used to place a smear of the culture on a marked area of twenty-four small saucers. After these had stood a few minutes, the process of washing began.

Three infected dishes and a dish without any infection (for control) were washed by each method. The marked area was then swabbed and the swab transferred to a tube of sterile nutrient broth. The methods used in washing are given below. Except in Nos. 1, 2, and 8, the water used was at 50 degrees centigrade or 122 degrees Fahrenheit. Soapy water was used in every case except Nos. 1, 2, and 7. Six applications of the dish mop or dish cloth or six immersions of the dish were made, the idea being to provide a standard for judging each method. In every case a control dish was washed in the same way as the infected dishes.

The methods used were as follows: (1) each dish was dipped separately in and out of cold water and drained; (2) this was the same as (1), except that boiling water was used; (3) the dishes were washed with dish mop, rinsed, and drained; (4) washed with dish mop, dried with towel; no rinsing; (5) washed with cloth,

rinsed, and dried with towel; (6) washed with cloth, dried with towel; no rinsing; (7) washed with cloth, no soap, rinsed, and drained; (8) washed with small brush, rinsed under small stream of water, and drained; soap was used with the brush, but as it happened, the water obtainable for this process was only 40 degrees centigrade or 102 degrees Fahrenheit.

This experiment showed the following results: In 1 there was no growth in the control tube, but growth in all three cultures from dishes; in 2 there was no growth in any tube; in 3 there was no growth in the control tube, but growth in one out of three cultures; in 4 there was no growth in the control, but growth in one out of three cultures; in 5 and 6 there was no growth in any tube; in 7 there was no growth in the control, but growth in one out of three cultures; in 8 there was no growth in the control tube, but growth in all three cultures.

It is obvious from the experiments that cold water does not remove bacteria from dishes. A dish cloth seems to be more effective than a dish mop. Water without soap does not do so well as water with soap. In No. 8 the lower temperature of the water made the process ineffective. This experiment was duplicated by Miss Nellie F. Rowe with the same results.

Miss M. B. Scotland, in a similar experiment in our laboratory, demonstrated the survival of bacteria after drying on silverware for four or five hours. In forty-two cases, every culture showed growth. This would indicate that dishes and silver incompletely washed after one meal may not be safe to use at the following meal. In restaurants, soda water stands, etc., the intervals are so short that the effects of drying are negligible, and the method of washing is most important.

* * * *

Report of the Meeting of the Executive Committee of the Dietetic Association in New York City

A meeting of the executive committee of the American Dietetic Association was held at the McAlpin Hotel, New York City, Tuesday, January 22, 1919. The committee decided to accept the invitation of the American Hospital Association to hold our next annual meeting in conjunction with theirs in Cincinnati, September 8-12, 1919.

The program will be a most instructive and interesting one, the commercial exhibits will be educational, and the opportunity to meet superintendents of hospitals will be valuable. Every dietitian should realize that she cannot afford to miss this opportunity to become acquainted with other dietitians. To know of the work being done in other dietary departments and of the way in which it is being done cannot fail to be helpful in one's own department.

In the past two years the attention given to the subjects in which we are interested has been such that more rapid development and greater changes have been made than would probably have been brought about in ten years in normal times. The annual meeting of the American Dietetic Association is the place to learn of these changes in more detail than can be done in reading of them, and to get the benefit of discussions from differing viewpoints.

The location of Cincinnati is such that dietitians from both the east and the west can reach it without great inconvenience. The meetings are to be held at the Gibson Hotel. The managers of this hotel assure us that ample accommodation for the meetings will be provided, and every possible comfort for the members.

Following the meeting of the executive committee, a meeting of the membership committee was called. Action

was taken upon all applications in the hands of the secretary at that time. Accepted members are notified by the secretary, after which dues should be paid to the treasurer, Emma Smedley, Department School Luncheons, 1425 Brandywine Street, Philadelphia. Others desiring to become members are requested to send in their application at once to the secretary, E. M. Geraghty, New Haven Hospital, New Haven, Conn.

For the benefit of those not familiar with the by-laws we insert Article I, which refers to membership:

ARTICLE I

MEMBERSHIP: There shall be one class of membership, viz: active.

Section 1: Persons eligible to active membership shall be:

(a) Graduates of at least a two-year course in Home Economics from a recognized school.

(b) Graduates of a one-year course in Home Economics (prior to June, 1917), who, following graduation, have had one year of successful experience in dietetic work.

(c) Research workers who have contributed to the advancement of dietetics.

(d) Practicing physicians in good standing.

(e) Persons whose special work is allied with dietetics.

Section 2: Application for membership shall be presented in writing, to the Corresponding Secretary and shall be endorsed by at least one member.

Section 3: Membership shall cease upon non-payment of dues only after written notice from the Corresponding Secretary.

The annual dues are \$2.

* * * *

NEWS NOTES OF DIETITIANS

Friends of Mrs. N. M. Wood, dietitian at the Methodist Hospital, Omaha, Neb., are glad to know that she was able to return to her department in January. Mrs. Wood has been ill for about three months. During this time the work was carried on by her assistant, Miss Mabel Brown.

Miss Eleanor Wells, lecturer at Teachers College and St. Luke's Hospital, New York City, suffered a very severe attack of influenza. Miss Wells has not yet sufficiently recovered her strength to resume her duties, but is spending some time in the mountains while convalescing.

On Monday evening, January 13, the Philadelphia League of Nursing Education, composed of the heads of training schools, invited the dietitians to their meeting, and the "Problems of the Dietitian" were discussed. Miss Gilson, dietitian of Pennsylvania Hospital, read a paper. Another paper was read by Miss McAllister, dietitian, Norristown State Hospital for the Insane. They were most interesting, as was also the discussion which followed. The idea was to bring the dietitian and the directress of nurses or superintendent in many places together, for, as Miss Clayton, from Blockley Hospital, said, "Difficulties usually arise from misunderstanding; therefore, let us understand one another."

Three Ways to Save in the Kitchen

(1) Of necessity, hospitals have to use a large amount of canned goods, and therefore the superintendent or housekeeper should watch the cans as they are emptied. You will be surprised at the large amount of syrup and juices that are left in the cans and wasted. This is also true of milk cans. See that all cans are well drained. This can be done if they are properly opened.

(2) Use up your stale bread. Use one-fourth stale bread to three-fourths meat in making meat balls. Stale bread can also be used in veal loaf, bread pudding, dressing for fowls, and in other ways.

(3) You can save money on potatoes by serving them so far as possible boiled with the jacket on—the old-fashioned way.



Conducted by BARROW B. LYONS
Superintendent Delaware Hospital, Wilmington, Del.

A GREAT ADVENTURE IN HUMAN SERVICE

What the Newly Created Division of Industrial Hygiene and Medicine of the United States Labor Department Is Trying to Accomplish for American Industry

The days of great adventure never have ceased, but the days of greatest adventure we are now living in. The great men of tomorrow will be the men who today are embarking upon new adventures to help the human race readjust itself to the great laws of nature and of the universe, the men who are giving up personal fortune that they may gain the satisfaction of creating a better world in which to live.

Among the greatest of the great adventures which are being organized today is the project planned by the Division of Industrial Hygiene and Medicine of the Working Conditions Service of the United States Labor Department. This branch of the Labor Department is planning to help the great masses of the workers in our country to live more natural and healthy lives. It will help the workers, who number over thirty millions, to guard against disease in the shop and in the home, to lessen fatigue which wears down the body and dulls the mind, and to live longer and enjoy life more fully; and, if the venture prospers, as it shows many signs of doing, the influence of the work will extend far beyond the ranks of the working people and into every fiber of the social structure.

For many, many years industry, which has created the highly complex civilization of today, has crushed and warped the human cogs in the machinery. Low wages, the unending monotony of work, the speeding-up and hours of over-time, inadequate ventilation of working places, poor illumination, excessive humidity in some factories, harmful dusts or gases in others, industrial poisons, inadequate sewage and waste disposal, inadequate toilet and washing facilities, unsafe drinking water in many plants, workroom congestion, poorly adapted workroom clothing, and lack of mechanical safeguards to dangerous machinery—all have tended to destroy the life and happiness which the very processes of industry were supposed to promote. This is the paradox of modern industry and of the lop-sided civilization which it has produced.

And now, the paradox is becoming apparent and men are becoming ashamed of the crimes against humanity which the stupidity of the past has engendered. The most intelligent employers are beginning to realize that it is actually to their advantage to protect the health of the men and women who are working for them.

It is this changing frame of mind that has made it possible for the little group of men in the Division of

Industrial Hygiene and Medicine at Washington to engage, with the backing of the government of the United States, in the great adventure which they have undertaken. The tremendous scope of the work is succinctly summed up by Dr. A. J. Lanza, chief of this newly created division. Dr. Lanza says:

"The functions of the division of Industrial Hygiene and Medicine of the Working Conditions Service are to conduct researches into the hygienic conditions in industrial plants in general; to make researches into specific occupational diseases and hazards, determining cause, effects and methods of prevention. These two functions are carried on by the Research Division, maintaining field offices in New York, Philadelphia, Pittsburgh, Cleveland, St. Louis, and Chicago.

"The division furnishes service also to industries by helping in the installation and standardization of systems of medical and surgical relief in government-owned and privately-owned plants, and in standardizing records and reports in plants.

"The service also maintains a register of industrial physicians, sanitarians, and nurses for the benefit of employers. The service also undertakes educational work in encouraging the presenting of papers at conferences of industrial surgeons and physicians, and for publication, and by preparing reports and statistics for the information of employers, employees and the general public."

This modest statement grows in magnitude when the tremendous field for its application is considered.

The register for industrial physicians and sanitarians is one of the most immediately important of activities of the new Division. Industrial concerns are looking for men qualified to take over the responsibility of keeping their employees in the best health, and young physicians are looking for such responsibilities; but these plants and the qualified men are as yet so few and far between that it has been difficult for them to make connections. The register, which now contains over one hundred names of men seeking to do this work, should prove of much assistance to both the progressive manufacturer and the interested physician.

Requests from industrial concerns for assistance in organizing health departments or in studying health conditions in their plants are coming in faster than the newly created division can handle them. The field offices of the Research Division in six important cities have been overwhelmed with work.

It is aimed to make each one of these research stations a complete unit headed by a field director. Under him will be several industrial physicians, a sanitarian, a chemical engineer, and an illuminating engineer, together with their necessary assistants. Up to the present time requests for advice have come mainly from employers, but there have been requests from labor unions asking for an investigation from the health standpoint of the conditions under which their members are working. The functions of the Research Branch are briefly outlined by its chief officer, Dr. Bernard J. Newman, as follows:

1. Research into working conditions for the ascertainment of those which are unfavorable to health and safety.
2. Research into housing and sanitary conditions in and surrounding the homes of workers in relation to their health and industrial efficiency.
3. Recommendations for their correction.
4. Determination of ways and means for their correction.
5. Research into working conditions suspected of being unfavorable to health.
6. Procurement of data for formulation of standards.
7. Determination of educational service to employers and employees.

In effecting practical reforms, the Divisions of Industrial Hygiene and Medicine can assume no arbitrary authority over local public health officials, but must always work with and through local officials. The educational

task which it faces seems colossal when it is considered that New York City is the only important city in the United States that has established a division of industrial hygiene under its local board of health and that there are still only a few states in the Union which have similar bureaus.

Before a plan for general education can be considered, however, it has been thought wise to educate men who will be able to carry on the work when the public realizes its value. Consequently, Dr. C. D. Selby, who heads the Education and Personnel Branch of the service, is preparing standardized courses of instruction for industrial physicians. He is working closely in accord with the men now conducting courses in industrial medicine and surgery which are being given at Harvard University, the University of Pennsylvania, Yale University, Ohio State University, Baylor University, Marquette University, and Boston University.

Dr. Selby is also in charge of the Plant Medicine and Surgery Branch of the division. His years of experience as a practical hygienist enable him to give expert advice regarding the establishment of health departments in plants which apply to the government for help in this direction.

If the vision of Dr. Newman, who heads the Research Branch, were widely seen, the government would very quickly find it expedient to appropriate larger funds for this work.

"The only way in which American working men can compete with foreign working men in the reconstruction period," says Dr. Newman, "is to bring about conditions which will increase output without injuring the worker. This can be done by increasing his physical well-being, reducing industrial fatigue, and reducing the time which he loses through ill health and injury. We must use every means that modern science has discovered to protect the health of the worker if this nation is to be successful in the world competition for trade which will follow the war."

This is the adventure in which the Division of Industrial Hygiene and Medicine of the Working Conditions Service is engaged. The prize to be won is increased health and happiness for more than thirty million working men and women, and for the generations of workers to come. The obstacles to be overcome are the selfishness of a materialistic age, the inertia of custom and tradition, the ignorance and carelessness bred of the old system, the dread of "paternalism" of the great masses of the working people, and the pressure of industrial system based upon the outworn theory of *laissez-faire*.

The stakes are big: the obstacles are worthy of strong men; and the adventure is worthy of the interest of all mankind.

* * * *

THE PLANT DISPENSARY

Practical Suggestions for the Establishment of Dispensaries in Industrial Concerns

By C. D. SELBY, M.D., Consulting Hygienist, United States Public Health Service, of the Division of Industrial Hygiene and Medicine of the Working Conditions Service, U. S. Department of Labor

Industrial medical service is essentially the practice of medicine, including preventive medicine, applied to industrial needs, and the facilities required for industrial practice are adaptations of those which are required for general and special practice elsewhere. It is not practicable to discuss these in detail; merely the adaptations are here considered.

The dispensary is the doctor's office. It is sometimes

called "dispensary" and sometimes "hospital." Which name is used is largely an affair of local preference and matters little so long as the name is known among the employees and is associated in their minds with the purpose for which the doctor's office exists. It will be designated in this discussion as the "dispensary."

LOCATION

The dispensary should be so situated as to be readily accessible to all who have need of it. This implies that it should not be in an upper story unless ample elevator service is supplied, nor in a far corner of a large plant without adequate transportation facilities. If it be desirable to have the dispensary at a gate, in connection with the employment department, dispensary facilities should be made more easily available to workers through substations conveniently located. Or it may be advantageous to house the treatment service in a centrally located dispensary and conduct physical examinations in the employment office.

It scarcely need be said that the dispensary should be well lighted—naturally and artificially—and free from dust, fumes, smoke, noise, etc.

ROOMS

The number of rooms necessary to adequate medical service depends upon (1) the number of workers employed, (2) the uncontrolled hazards to health, and (3) the number and variety of activities carried on by the physician and his aids. If the treatment service includes special activities, such as operative surgery, dental treatments, taking of x-ray pictures, eye treatments, etc., and the volume of work is sufficiently great, special rooms should be provided therefor.

A dressing room is essential to all dispensaries and this should be of such dimensions as to enable the peak load of dressings to be handled with speed and ease. A waiting room is desirable but not essential to a well-organized dispensary, as congestion at dressing stations is slight when treatments are given by schedule. A small doctor's office should be equipped for consultation purposes. This room should also secure to the physician a place of privacy for odd moments and head work. Examination rooms need not be of large floor dimensions, and the number of rooms used for this purpose depends upon the labor turnover and the speed with which applicants must be examined. Small disrobing booths may open directly into the examination rooms—at least two being necessary to each room—or they may open into a passageway communicating with two or more examination rooms. The need of wards, or rather beds, is difficult to ascertain, except by experience. Rest rooms, which are maintained in a large majority of industrial establishments, especially where female help is used to any real extent, should be attached to medical departments, as persons who are forced to seek recumbency during hours of employment should be assumed to be also in need of medical advice.

A most necessary room, though one which is often overlooked, is that for the storage of a limited amount of supplies and materials that are in daily use at the dispensary. Supplies in bulk may be kept in general store rooms.

Receiving rooms, toilets, dark rooms and other special conveniences may be fitted up according to the need at the specific plant. Two principles which may prove useful in dispensary planning are: (1) those rooms which are most frequently used should be most accessible; and (2) arrangements should be such as to permit passage in and out without confusion.

DISPENSARY EQUIPMENT

A very commendable principle to establish is that no equipment should be acquired until its value has been definitely proved and its need positively confirmed. To specify the articles of furniture, instruments, and other equipment which are essential is quite evidently out of the question, as physicians are individual laws unto themselves in this respect. Only such articles as may be unusual, or for other reasons deserve special mention, will be mentioned.

Suggestions for dressing room equipment will serve as a guide against over-equipping. The best dressing rooms are those which are most simply furnished. A one-unit room (one dressing center, which room can be used by two attendants) should contain:

1. Dressing stand.
2. Waste receptacle.
3. Stationary wash bowl.
4. Stools and chairs (for treatment of lower extremities when patients must be seated).
5. Foot and arm rests.
6. Instrument, medicine and supply cabinets.
7. Operating table (occasions for its use may be rare but it can not very well be omitted unless some substitute for recumbency is provided).
8. Stationary foot tub.
9. Nitrous oxide apparatus (if operative work is performed).
10. Sterilizer.
11. Specialist chair.
12. Electric magnet.
13. Small x-ray apparatus (if otherwise not available).
14. Apparatus for treatment of contusions and similar injuries (optional).
15. Towel hampers.
16. Desk (when clerical work is done in the dressing room).
17. Instruments and supplies.

The arrangement of the furniture and fixtures will vary with the size and shape of the room and the amount of equipment, but the arrangement should be conducive to systematic dressing room work, eliminating as far as possible the necessity of passing back and forth of the attendants.

Examination rooms should be severely plain, being equipped with two chairs, a small table used as a desk, possibly an examination table and the necessary apparatus for testing the blood pressure, hearing, sight, etc.

Industrial dental dispensaries are merely dental offices set up in industrial establishments, with practically the same equipment and supplies.

Several conveniences, but not necessities, of dispensary equipment are (1) drinking fountain; (2) dental spittoon for use in mouth and throat work; (3) large bath tub for treatment of heat cases; and (4) fountain for dispensing of a carbonated solution of magnesium sulphate to lead workers.

Transportation facilities should be provided for patients who can not walk to the dispensary.

Industrial physicians should keep such records of injuries and illnesses as would be of assistance (1) to the compensation department in making just compensation payments; (2) to the safety department in furthering accident prevention; and (3) to the medical department in ascertaining the presence of insanitary conditions and hazards to health.

These records should show the volume and variety of work done by the medical department in comparison with the needs to provide for an adequate health service.

Such reports should be made by industrial physicians as to convey a clear idea of the records of the department to officers who are interested.

Money is an article which may be used as a universal passport to everywhere except Heaven, and a universal provider of everything except happiness.

DISPENSARY AND OUT-PATIENT WORK

Conducted by MICHAEL M. DAVIS, Jr.

Director of the Boston Dispensary.

Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

A PROGRAM OF CLINICAL ACTIVITIES FOR TOWNS OF APPROXIMATELY TWENTY THOUSAND POPULATION

Prevention of Hospitalization Primary Object of Clinics— Clinic Needs of Small Community and Program for Meeting Them—Initial Step Taken by One Community

By D. B. ARMSTRONG, M. D., Framingham, Mass.

It will probably be conceded that the war has increased the needs for out-patient service, perhaps particularly in the smaller communities, where organizations have been slow to recognize their obligations in this direction. In the smaller towns, the out-patient service situation presents a problem practically untouched. It would seem, further, from my experience, that the small community presents a rather unique opportunity for those interested in medicine and health to think of this community as a functioning entity, and to consider the out-patient opportunities for service from a preventive point of view, in close conjunction with the routine therapeutic procedures.

Fortunately, the committee on dispensary work of the American Hospital Association has given some consideration to this problem and some time ago commissioned the writer, a member of this committee, to attempt the construction of a tentative program for the development of out-patient facilities in the smaller urban communities, taking into account both public health clinics and clinics for diagnosis and treatment. In some respects it was thought that experience in connection with the Framingham Community Health and Tuberculosis Demonstration might prove of value in determining the needs, as well as the possibilities, in the smaller town.

After favorable consideration of this report by the committee on dispensary work at the recent Atlantic City meeting of the American Hospital Association, it was suggested that the data be prepared for publication. The program as suggested by this committee may be presented as follows:

TYPE OF COMMUNITY

In considering a type community for this clinic program, it has been assumed that the average town of 20,000 population would present the following standard characteristics: (1) a reasonably autonomous community, with a minimum commuting population, not a suburb to a large city; (2) an industrial community, either with mixed industries or one predominating type of industry; (3) a growing community, with a certain percentage of foreign-born population, mixed races, etc.; (4) a community with the ordinary health machinery, including a

board of health, and probably a local hospital, though presumably not an established out-patient service.

ESSENTIAL OBJECTS

The essential objects in the development of any clinic program in such a community would include encouraging the town to recognize its medical and health clinic needs and to try, through public and private channels, to meet these needs. This would probably involve the definitizing of opportunities for community service. The hospitals and other existing treatment agencies should be encouraged to see the community as a whole, and not to deal exclusively with individual cases. It is essential to protect the hospital and therapeutic facilities by a bulwark of clinical agencies, thereby heading off many potential patients from hospital treatment by means of education, preventive advice, and early treatment of incipient conditions. These clinics should serve primarily to decrease the need for hospital treatment, and not primarily as an avenue into the hospital.

The clinic service should be put on a self-respecting, self-supporting basis, thereby encouraging adequate medical attention to the class of individuals who fall between the very poor and the wealthy. The result would be a consequent improvement of medical practice in general, with its elevation and standardization.

COMMUNITY NEEDS

The clinic needs of a community of this size, are in general as follows: (1) preventive, educative, health creative; (2) disease detective, eliminative, suppressive; (3) curative, therapeutic.

PROGRAM FOR MEETING THESE NEEDS

The hospitals of a small community are, together with the health department, its chief centers of organized service for health. The provision of clinics for a community should be based upon, or at least closely connected with, its hospital or hospitals. The hospitals have medical equipment and often have space which can be used for clinics with great advantage.

The practical clinic needs of a community fall into two classes—(1) clinics for public health work, and (2) clinics for diagnosis and treatment. The two groups, however, overlap considerably in their practical operation, both as to machinery and field.

The public health clinics grow out of the demand upon the health department to meet the medical needs of a community. The clinics for diagnosis and treatment grow out of the demand upon the hospital to meet the same needs. By cooperation of the hospitals with the health department, or such voluntary agencies as tuberculosis committees, and by coordination of the actual work done by all these agencies, the most efficient service will be secured with the greatest economy.

I. PUBLIC HEALTH CLINICS

1. *Prenatal and Infant Work.*—In the establishment of infant clinics in a small city the essential considerations are at least in part as follows:

The work should be designed to reach both sick and well babies, should be partly therapeutic (in cooperation with local physicians and institutions), and should be largely educational, covering the needs of infant hygiene, feeding, etc.

In most communities, infant clinics may be essentially educational and consultation establishments; in some places, they may also be milk stations.

The work should be associated with infant welfare nursing, both prenatal and postnatal in character, and a prenatal clinic for the examination and advice of ex-

pectant mothers should be closely associated with the infant welfare clinic whenever possible.

While the clinics themselves are essential for consultations and publicity, they are perhaps, from a practical point of view, less important than the home nursing and advice associated with the clinic work. Constant medical attention is essential at the clinics, with expert pediatric and obstetrical medical advisory service in difficult cases. The medical service should be paid for. The clinics may possibly be made partly self-supporting.

These clinics may be held in school buildings, community centers, etc., and should number from two to four for a community of this size, being held weekly in each neighborhood. One prenatal clinic a week will usually be sufficient. Preferably, the infant welfare work should be under the auspices of the town's official health agencies, though it may be established under private agencies.

2. *The Preschool Period.*—From a practical point of view, it is somewhat artificial to consider this age group separately. Ordinarily, the needs of this group, particularly in a small city, can be met by the infant or school health machinery. Important points for this group are:

The work should pay special attention to educational hygiene, feeding and nutrition, the detection and elimination of physical defects, etc.

The tuberculin testing of large groups of children in this age group will throw light on the prevalence of infection, may indicate the need for special measures, may emphasize the need for milk pasteurization, and will furnish valuable scientific data regarding the probable age at which tuberculous infection ordinarily occurs.

Work in this group should be under the auspices of the community's health authorities and may be supervised by the board of health or the school committee, depending upon the arrangement in the particular community.

This work as well as that with the school children may well be associated with summer health camp activities and in most communities be made partly self-supporting.

3. *The School Period.*—This work must be of necessity both diagnostic and therapeutic in character. The work of examining and detecting disease or defect is done partly in the school and partly in the clinics. The curative work is primarily for the clinics. This service should be closely allied with the health educational work in the schools along other lines, the recreation and athletic work, the hygiene instruction of both pupils and teachers, the physical educational activities, the open-window room work, the school lunch provision, etc. The staff for a town of this size would include a full-time physician, two full-time nurses, and such specialists as can be provided in the clinics. A dentist is particularly needed.

There should be at least one central dental clinic connected with the main clinic for diagnosis and treatment, and there should be substations, if possible, established in school buildings, community centers, or factories. In the evening the facilities should be open to the public on a pay basis, under other auspices, perhaps, than the board of health or school committee.

An eye-refraction clinic should be established, possibly in the high school building, but preferably as part of the main clinic for diagnosis and treatment. A nose and throat clinic should be similarly established, probably at the hospital.

All of the clinic work should be primarily on a pay basis, as it is essentially therapeutic in character, special provision being made for necessitous cases, after investigation. It should be carried out in close cooperation with the local industries, local hospitals, community centers, etc.

4. *The Industrial Group.*—Industrial clinics should be medical and dental in character and should be operated in close cooperation with other community agencies. Work should be largely diagnostic, cases needing treatment being referred to local physicians or medical clinics, except where minor or emergency problems are presented. Single industries employing from one thousand five hundred to three thousand employees should have independent clinic establishments, with at least one full-time physician and two nurses. Smaller industries, providing at least first-aid rooms, may combine for part-time medical and nursing service or may make an arrangement for service with one or another of the clinics for diagnosis and treatment. In connection with the medical and nursing work, a certain amount of outside work among the families of the employees may cautiously be developed, to be carried out in cooperation with school, district nursing, and other activities. All of this work, for the sake of uniformity and standardization, might preferably come under at least the advisory supervision of the board of health, if that agency employs a full-time medical officer of health. Part of the time of this official may possibly be given to the minor industries on a part-time basis.

5. *Tuberculosis.*—In addition to the medical and sanitary staff of the local board of health, this work will require at least the full time of one tuberculosis nurse, who will divide her time between the clinic and the home work. The clinic should be under the direct supervision of the board of health, located centrally, possibly with substations in convenient places in outlying neighborhoods in the community.

II. CLINICS FOR DIAGNOSIS AND TREATMENT

Certain essentials regarding these clinics may be briefly indicated as follows:

The medical clinics in a community of this size should be established under the joint auspices of the local health and private hospital authorities. They should be located in conjunction with the hospitals, as an out-patient service, and should be made as nearly as possible self-supporting. They should furnish the treatment end for the diagnostic work being done in the infant clinics, in the schools, and in the factories. Local medical talent should be employed in the routine work of the clinics, under expert supervision, associated with a specialist consultation service, possibly developing gradually a certain amount of specialization on the part of the local physician.

These clinics should be operated, so far as possible, on a pay, self-supporting basis, with compensation for the medical staff.

This medical clinic work is an essential factor in any complete community organization for prevention and cure of disease. It is an essential supplement to the infant, school, and factory educational and diagnostic work. It is necessary in order that all lines of approach to the health of the community may be made to function to their fullest advantage. It is a vital factor in any attack upon the community's death and morbidity rates. It must include both medical and surgical service and such of the specialties as can be added, depending on local conditions. If there are two hospitals in the community which need to be considered from the point of view of cooperation, the medical work may perhaps be carried out by one, and the surgical or some of the special work by the other.

The functions of the medical clinic should include the making of routine health examinations in cooperation with an expert consultation service, the chief object being the detection of incipient disease and the establishment of preventive measures. Possibly this medical ex-

amination work may be fostered by private agencies through the development of medical examination groups among the lay citizens.

The clinic should provide a general medical service, both for minor ills and for the more serious chronic affections, such as the cardiac, gastro-intestinal, and other cases.

If many sick babies and children have to be cared for, a special pediatric division should be provided.

In the surgical clinic, special attention should be given to the minor surgical cases. This clinic may do industrial accident work for small local business enterprises.

As to the special clinics, all of these will strengthen one another and add greatly to the value of the general medical and surgical clinics, if all are held in one building and under one organization. Ideally, they should be the out-patient department of the hospital of the town. Where this is not possible, some of the specialties may be in quarters provided directly by the board of health or school board.

The eye clinic and the ear, nose and throat clinic should do both school and adult work. An orthopedic clinic is very desirable, if a visiting orthopedist can be obtained, even if infrequently. The dental clinic is an essential service for children and adults (see above). A venereal clinic should be operated at least partly in the evenings and should be coordinated with national and state programs to combat syphilis and gonorrhea.

III. THE COST

A very rough indication of the probable gross cost of such health clinic machinery, both to the community and to the private agencies, may be indicated as follows:

A. THE TOWN ITSELF

1. A school physician (\$2,500), a board of health physician devoting part of his time to industrial work (\$3,000), and an infant welfare clinic physician (\$300)—total.....	\$ 5,800
2. A part-time dentist.....	700
3. An infant welfare and pre-school nurse (\$1,200), two school nurses (\$2,200), and a tuberculosis nurse (\$1,200)—total....	4,600
4. Infant welfare, school, and tuberculosis clinic maintenance....	1,500

Grand Total\$12,600

B. PRIVATE AGENCIES (INDUSTRY)

1. Three industrial physicians.....	\$ 7,500
2. Six industrial nurses.....	7,000
3. Industrial and general medical clinic maintenance.....	3,500

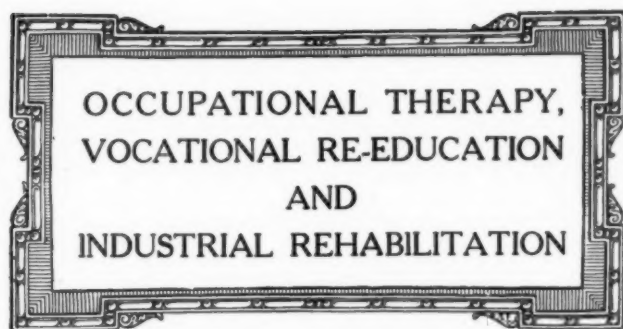
Total\$18,000

It must be realized that this cost will cover other activities not itemized in the above list and that very substantial financial returns may be expected from certain of the services. Further, aside from financial returns, the industrial work more than compensates the industries in the conservation of labor, the efficiency of employees, etc.

CONCLUSIONS

With a few exceptions, the foregoing services are in actual operation, or planned for establishment, in Framingham, Mass., in connection with the Community Health and Tuberculosis Demonstration. This applies particularly to the preventive and diagnostic aspect of this clinic program. Definite plans are in process of construction for the therapeutic clinic program as well, and it is believed that cooperation will be secured from hospitals and local physicians. For that reason, it may be wise to look upon Framingham as a laboratory for experimentation and research in the establishment and operation of a reasonably complete community clinic program for smaller

Undoubtedly, an impetus has been given to this work by the war. The war has emphasized the need for both public health services and therapeutic facilities in clinics.



Conducted by DOUGLAS C. McMURTRIE, Director Red Cross Institute for Crippled and Disabled Men and ELIZABETH G. UPHAM, Advisor in Occupational Therapy, Milwaukee-Downer College.

OCCUPATION THERAPY*

Purely Therapeutic Occupation Training and Training With an Educational and Economic Purpose Must Be Distinguished—Needs of Teachers Must Be Met

By SUSAN C. JOHNSON, Director of Occupation at Montefiore Home and Hospitals, New York City, and Lecturer in Occupation Therapy at Teachers College, Columbia University

Considerable difference of opinion exists upon what are the essentials in any course of study for teachers of occupations in hospitals. This is not surprising in view of the sudden call for teachers to enter this field in large numbers, and when we consider that in deciding upon the training for the teacher we virtually decide what occupations shall be taught in the hospital; that military hospitals and civil hospitals each have their separate problems; and that while the purpose of all instruction in hospitals should be therapeutic primarily, the re-education of the soldier has put greater emphasis upon the educational aspect than has existed heretofore.

Hospitals, taken as a whole, constitute a world of their own about whose internal life non-medical people are generally very ignorant. When hospital social service was established, a new group of professional people entered the realm of hospital management, and, under normal conditions, were absorbed into it without undue excitement or radical differences. The same thing would have been true, no doubt, of the entrance of the occupation teacher, but the idea that it was desirable to have teachers specially trained for this work and that they could well be non-medical people was just coming to be accepted when the avalanche of war necessity descended upon us. The great demand for nurses and the need for numbers of teachers in this field swept occupations out of the hands of the nurse without further discussion and made necessary either the absorption of a foreign group into the hospital regime or the discard of the whole idea of using occupation for a therapeutic purpose in military hospitals. It is not surprising that this situation with all its related problems threatened seriously the progress of occupation therapy,¹ but now that this means of treatment has gained an ac-

cepted place in the government plans for reconstruction, the recent scrutiny and drubbing which it has had should prove a blessing in disguise. Both its staunch defenders and its recent converts should set to work to map a clearer road ahead by which both civil and military hospitals may travel to better results.

What seems to be a difference of opinion among those who are working with the same end in view, is often *not* a real difference at all, but is a misunderstanding due to our failure to keep always before us the several natural divisions of our work and the different purposes of each, as well as the fact that each must overlap and merge one into the other instead of being separate and aloof. No standards for training teachers can be set without recognition of these different elements. It might appear that hospitals as such should be concerned with occupation only when it is given for a strictly therapeutic purpose, and this will be true of hospitals for the insane. However, in other classes of hospitals, the educational and economic aspects are so closely allied with the therapeutic that, because of their very practicality, they force themselves into the problem while the patient is still in need of hospital care.

Consequently, after eliminating the retraining of the cripples subsequent to their discharge from the hospital, there remains within the hospital problem itself two main divisions, viz: invalid occupations for a therapeutic purpose only and the more formal occupations with the moral and educational purpose added to the therapeutic. After these two main divisions and their interrelations have been established, it might appear that the whole matter could be settled upon an obvious basis, but, on the contrary, only the more simple of the many problems would have been met. The sex, age, social and industrial history, and the diagnoses and prognoses, as well as the personality of the patient, are all factors which make it necessary to plan with much greater consideration for the individual than is done in any system of instruction under normal conditions.

Military hospitals present a less complex problem than civil hospitals, for in the military there is but one sex, ages are within a closer range, and there is segregation into reconstruction hospitals of cases for formal training, as well as the usual segregation based upon diagnosis, while in the civil hospitals we have both sexes, all ages, no classification with regard to the occupational forecast, and the additional problem of charity cases. Further than this, the period of time for formal instruction can be made a reasonable one under the system of the curative workshop of military hospitals, while patients in civil hospitals must generally be discharged as soon as convalescence is well established or the disease is pronounced stationary, except perhaps for mental cases. In hospitals where there are not out-patient workshops this latter condition in itself would prevent occupation from being anything but therapeutic in purpose. This purely therapeutic purpose, without any association with educational or industrial matters is full and sufficient reason for occupation with any long-time cases with favorable prognoses, with most chronic cases, with patients suffering from nervous and mental diseases, and with orthopedic cases treated upon a physiological basis, but this does not cover all the needs of hospitals.

Large numbers of patients are discharged daily from our civil hospitals who have years ahead in which they must be wholly or partially dependent. How great this dependence will become hangs largely upon how much they are helped to help themselves in the early stages of their disability. It is not with those among them who

*Read before the Second Annual Meeting of the National Society for the Promotion of Occupational Therapy, New York City, September 2-4, 1918.

¹Terms in common use which relate to occupation therapy are very generally applied with a loose interpretation. Occupation therapy as used in the military hospitals seems to include occupations where the purpose is primarily that of education and that which should be primarily therapeutic is termed "ward occupation."

The terms "diversional occupation" and "invalid occupation" have been used to cover both the whole and a part of what the term "occupation therapy" includes.

Although I believe that the term occupation therapy should be used to apply exclusively to where the purpose of occupation is primarily therapeutic, in this paper I have used the term "invalid occupation" in this sense in order to differentiate it from occupation given primarily for an educational purpose while the person employed is under medical care.

can re-enter industry under normal conditions in spite of their disability that occupation therapy should concern itself beyond the wards, but rather with those who can contribute to their own support or at least aid in preventing self-deterioration under some protective system of education and production with hours and conditions of work adjusted to their needs.

The first step in such a system would be the further development of the out-patient workshop in connection with clinics or at least directly under hospital supervision. The idea of this shop and of the curative workshop are much the same, but the development of the former has had a serious setback through war conditions, while the latter promises to achieve large ends.

The development of a system of productive occupation with needed medical care for the substandard worker is obviously not a simple matter; the ups and downs and the present discontinuance of such enterprises as the Sharon-Ware Shops in New York and the out-patient shop at the Massachusetts General Hospital might discourage us, but there is much in these and in certain other examples which hold out real encouragement, and the matter is of such great philanthropic and economic importance that it should not be neglected because of the difficult problems which it involves.

The history of cases discharged daily from our hospitals would make a more forceful argument and stronger appeal than that which any individual could make, and one visit to the Neurological Hospital at Blackwells Island should set one searching for all preventive measures possible. Also, we shall surely have soldiers discharged from hospitals whose condition will place them in the zone between hospital residence and industry under normal conditions who can never compete with normal labor but who could carry on productive occupations within some protective system.

The extension of the out-patient shop to all civil hospitals of certain types and the development of these to their fullest possibilities would establish uniformity of purpose between the military and the civil hospitals in occupational treatment. Then discharged patients from both alike could benefit by any municipal or state plan of education and specialized industry for substandard workers as well as for those who can be fitted to compete under normal conditions. It is not within the purpose of this paper to enter upon the details of such a plan, but until some organized system supported by public moneys is put into operation, occupation therapy must stop short of its economic possibilities and confine itself to a purely therapeutic purpose in civil hospitals. Furthermore, what should constitute the proper training of the teacher will remain a conundrum until the provinces of invalid occupations and occupations which have a larger educational or reeducational purpose are more clearly defined and constantly borne in mind, and until the right interrelation between the two is worked out and established upon a sound basis.

The teacher in both the curative workshop and in the out-patient shop must obviously be a specialist in one or more academic, industrial, or commercial subjects and have an understanding of vocational education. On the other hand, the teacher of invalid occupation in the wards or in workrooms as they exist in most hospitals must be a master of a number of simple occupations, but not a Jack of several, as is too often the case. Both will need an understanding of the psychology of both normal and abnormal minds, and will need to be well grounded in the principles and methods of teaching the sick. My own ob-

servation has led me to believe that poor results are due quite as often to the lack of logical methods of teaching as to the lack of knowledge of the subject matter to be taught. The subject matter in which the teacher of diversional occupations should be prepared to give instruction may well include any occupation the processes of which can be accomplished under hospital conditions, the products of which have an intrinsic value but which do not compete with machine or factory output, and the development of which will provide either simple, straightforward work which may produce a quieting effect or graded complexities which may stimulate the patient to greater effort or encourage him in self-expression. While games and other recreations have a legitimate place in occupation therapy, particularly with mental and nervous cases, there has been considerable misunderstanding regarding this which is largely responsible for the idea that the training of the occupation teacher is a simple matter which has no more serious purpose than that of amusement and which can be accomplished with a raw recruit in a few days' time. Personally, I think there is danger to the sick person in including any academic or commercial subject within the realm of invalid occupation unless it should be drawing and design, for our aim here is to teach the satisfaction and rest which come through suitable occupation rather than to tax the mind with complexities.

It is not improbable that teachers of invalid occupations who have the right personal qualifications and educational background can be prepared for hospital teaching under supervision in a period of from four to six months, according to the amount of technical training which they possessed on entering the course. They should spend a considerable portion of this time in hospital practice teaching, and any such limited course would need to require a prerequisite in at least two of the more important crafts and also in drawing and design, for these are fundamental in handcraft and they cannot be acquired through a cramming process. Those who are to fill positions as head teachers should have in addition to these prerequisites at least from eight to ten months' training with considerable time devoted to matters of administration of departments. Teachers for civil hospitals will generally need a longer and fuller training than that required for military hospitals because there is less distribution of duties in the civil hospitals. Those without either proficiency in handcrafts or design or without previous teaching experience would hardly be able to qualify for assistant teachers with less than from eight to ten months' training.

Teachers for the curative and out-patient shops who have already had some of the training required will be found more readily than those for invalid occupation, for the regular rank and file of teachers of academic and commercial subjects and practical arts can be drawn upon for this field better than for the field of invalid occupations, as matters concerning the health of the patient will be less delicate after he can leave the ward and his teaching may then fall into more nearly normal lines.

In the emergency of the war the great dearth of teachers who were qualified by experience to act as directors and instructors has proved a considerable detriment in obtaining worth-while results from ward occupations in military hospitals. Persons filling such positions would obviously need to have some knowledge of all the subjects which are included in both the therapeutic and educational aspects of the work; should be specialists in one or more of these subjects; should have a thorough knowledge of all matters concerning equipment and supplies; should have had pre-

vious experience in handling sick people; should have an understanding of the whole field of occupation therapy with its therapeutic, educational, and vocational aspects, and an understanding of their right interrelations. This great field of occupation for the sick and afflicted will never bear full fruit until the dignity and importance of the position of the teacher in this field is recognized, until physicians give more detailed thought to the effect of occupations on the mind and body, and until educators realize that ward occupations bear as important a relation to re-education as primary education does to secondary.

In an address before this society a year ago, I stated that the nurse could not be a satisfactory teacher of occupations without thorough and special training in hand craft and design; that she could not perform the duties of the occupation teacher and the nurse with full credit to both; and that occupations fell far short of their possibilities under such an arrangement of double duty for the nurse. Now, not only has the new teacher arrived who is replacing the nurse in instruction in occupations, but the pendulum has swung so far to the opposite extreme that I fear that we are losing sight of the nursing aspect of the work of the teacher, and therein lies another danger.

This suggests that in order to keep the right relations of the duties of the nurse and the teacher they should get their training side by side in the same atmosphere, and that training schools for nurses might be the rational place for at least a part of the training of the occupation teacher. Under such an arrangement, the director of occupations for the hospital should be qualified to take a place upon the faculty of the training school and not only to instruct the occupation teachers in their subjects but also to give certain lectures which would provide the information to nurses needed to establish the right understanding and promote cooperation between the two groups.

It will always be a problem to keep a definite middle path between the nursing and the teaching aspects of this work. Therapeutics have too often been an excuse for poor craftsmanship and trivial results. On the other hand, those whose sole training has been that of the craftsman or has been in educational and vocational fields outside of the hospital would naturally and quite unconsciously put too strong an emphasis upon the educational and economic sides. It is the ability to keep a fine balance between these two things which, after all, will prove the real understanding and efficiency of the directors of occupation therapy.

In order to maintain the standards for which we aim when we plan and consider and plan again for the preparation of the teacher, we must follow her beyond the training classes and into the hospital.

Under conditions as they exist today in most places, even the best qualified teacher is laboring against too heavy odds to be able to maintain the standards which we may set for her.²

Time of preparation for work, provision of the right materials and equipment, and the convenient arrangement of supply closets and workrooms in close proximity to wards are all matters having much greater importance than is recognized if we can judge by present conditions. The teacher's time and vitality will reach just so far and, if it is dissipated through working under adverse conditions, the result will be to lessen the efficiency of her work with the patients.

²As the result of a motion which followed this paper, a committee was appointed to give systematic and practical aid to teachers for maintaining good standards in products. The first installment of the work of this committee will be published in the near future by the National Society for the Promotion of Occupational Therapy.

After consideration of the internal conditions under which the occupation teacher serves, I know of no other aid to her in her work so important as that of providing means for maintaining high standards in the products of occupation. The nose of the average occupation teacher is kept so close to the grindstone that she has little time in which to search out models of real worth which are suited to her needs. It would be highly desirable to have one professional designer with each group of teachers who could devote her whole time to this phase of the work, and there should be some systematic way devised for placing at the convenient disposal of the teacher good models, photographs, drawings, and designs suitable for hand craft and for the needs of work which can be accomplished under conditions met with in the hospitals.

It would seem that this period of sudden expansion is not the time for attempting to standardize any part of the work in occupation therapy for we certainly are in a formative period still. However, in order that we may work toward better standards on surer grounds, it seems opportune that this society should undertake to promote activity which will provide for: (1) shops in civil hospitals which parallel the purpose of the curative workshop of military hospitals; (2) a protective system of work for substandard workers after discharge from hospitals; (3) better conditions of service for teachers in hospitals; (4) practical aid to the teacher in maintaining the best standards in products.

* * * *

A MARKET GARDEN TRAINING CENTER

Course of Training at Cardiff, Wales, Gives Disabled Men Instruction in Growing Vegetables, in Fence-Building, Hedging, Ditching, Etc.

When the Welsh town-planning and housing trust, which was founded to promote the better planning of towns and villages and the better housing of the people, found that the war prevented any progress in housing reform, it applied its energies and resources to the re-education of disabled soldiers. At Cardiff, on an estate owned by the trust three miles from the center of the town, it has established under the sanction of the Ministry of Pensions and with the cooperation of the Joint Disablement Committee of South Wales and Monmouthshire a market garden training center "for disabled soldiers, sailors and airmen."

The course of training at Green Farm, as the estate is known, lasts a year and aims to give thorough practical and theoretical knowledge of the growing of all kinds of fruits and vegetables, and in addition such knowledge of fence-building, hedging, ditching, and the erection of sheds, as would be useful to a market-gardener.

Men are sent to the center by the local war pensions committees and receive the usual allowances from the Pensions Ministry for support while taking training. They are lodged in comfortable houses as near the training center as possible. Most of them were sailors before the war with little or no knowledge of gardening, but they have gone into the work earnestly and are making good progress. The disabilities include heart trouble, loss of right eye, debility following malaria, and loss of right thumb.

Upon completion of their course they will be advised to take work in a market garden or private garden; then, after they have acquired experience, they will be helped to take up a piece of land near a good market, if they wish. The trust is considering a plan whereby it will settle its pupils in market garden holdings equipped with houses and outbuildings on part of the Green Farm estate.

BULLETIN OF THE AMERICAN HOSPITAL ASSOCIATION

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Institutional Membership

Nation-wide hospital organization is imperative. Nation-wide hospital problems can not be solved without organized hospital opinion and influence. The strength of the hospitals can best be exerted through an association in which the hospitals themselves are the constituent members. The American Hospital Association is such an association.

Please send in your applications.

Application blanks have been sent all institutions formerly represented in the association by personal membership. Additional application blanks will be sent upon request.

Since the publication of the list of applications for institutional membership, applications have been received from the following institutions:

Brinkley-Jones Hospital Assn.....	Milford Kansas.
City and County Hospital.....	St. Paul, Minn.
Charity Hospital.....	Norristown, Pa.
W. A. Foote Memorial Hospital.....	Jackson, Mich.
W. C. Graham Hospital.....	Keokuk, Iowa.
Gartly-Ramsay Hospital.....	Memphis, Tenn.
Hoffman Hospital.....	Keyser, W. Va.
Hebrew Hospital.....	Baltimore, Md.
Hackensack Hospital.....	Hackensack, N. J.
Howard Hospital.....	Philadelphia, Pa.
John N. Norton Memorial Infirmary.....	Louisville, Ky.
Johns Hopkins Hospital.....	Baltimore, Md.
Jewish Hospital.....	St. Louis, Mo.
Lima Hospital.....	Lima, Ohio.
Mercy Hospital.....	Toledo, Ohio.
Mary Hitchcock Mem. Hospital.....	Hanover, New Hampshire
Memorial Hospital.....	Pawtucket, R. I.
The Mayo Clinic.....	Rochester, Minn.
New England Baptist Hospital.....	Boston, Mass.
Nathan Littauer Hospital.....	Gloversville, N. Y.
Nathan & Miriam Barnett Mem. Hospital.....	Paterson, N. J.
Newark Beth Israel Hospital.....	Newark, N. J.
Ohio Valley General Hospital.....	Wheeling, W. Va.
Provident Hospital.....	Chicago, Ill.
Pennsylvania Hospital.....	Philadelphia, Pa.
Research Hospital.....	Kansas City, Mo.
South Chicago Hospital.....	Chicago, Ill.
St. Joseph's Hospital.....	Lancaster, Pa.
St. Luke's Hospital.....	New Bedford, Mass.
St. Agnes Hospital.....	Raleigh, N. C.
Somerset Hospital.....	Somerville, N. J.
St. Elizabeth Hospital.....	Youngstown, O.
Theda Clark Memorial Hospital.....	Neenah, Wis.
University Hospital.....	Boulder, Colo.
West Suburban Hospital.....	Oak Park, Ill.
Worcester Hahnemann Hospital.....	Worcester, Mass.
Warren General Hospital.....	Warren, Pa.

Wilkes-Barre City Hospital.....Wilkes-Barre, Pa.
Winnipeg General Hospital.....Winnipeg, Canada.

Sixty-one institutions, therefore, have made application for institutional membership. Approximately, however, 800 institutions are now represented by personal membership. The outlook is encouraging, and it is hoped that every institution now represented by personal membership will have become an institutional member before the next convention.

Audit of the Association Books

In accordance with the recommendations of the Auditing Committee at the twentieth annual convention, the books of the association are now being audited by Robert Hamilton Smith, accountant, Washington, D. C. The auditor has been instructed to make an auditing report complete in every detail. It is hoped the audit will be ready for publication in the bulletin of the association at an early date.

Twenty-first Annual Convention, American Hospital Association

September 8-12, 1919, Cincinnati, Ohio. Headquarters, Hotel Gibson. *Make your reservation now.* The Gibson Hotel, headquarters, is a new, modern, 500-room hotel. It is not large enough, however, to house all those attending the convention. It is, therefore, none too early to advise members and guests who wish to live in the headquarters hotel during convention week to make their reservations now.

The rates guaranteed by the hotel are as follows: Single rates, \$2, \$2.50, \$3, \$3.50, \$4 and \$5; double rates, \$3.50, \$4, \$4.50, \$5, \$5.50, \$6 and \$7. All rooms have private bath, either shower, tub, or combination tub and shower. Large display rooms that will accommodate five to eight persons, single bed for each person, with private bath, may be had at the rate of \$2 per person.

In a later bulletin complete list of desirable hotel accommodations in Cincinnati will be published. Both by mail and through the bulletin of the association, all members, as well as members of allied associations and others, will receive complete information about Cincinnati and the convention.

Program

As heretofore, there will be both general sessions and section meetings. The sections already organized are: Nursing, Dietetics, Social Service, Out-Patient, Hospital Construction, and Hospital Administration. Last year the American Dietetic Association constituted, so far as the program was concerned, the dietetic section. The same arrangement will continue this year. It has been suggested that the program for the Social Service Section be arranged by or in cooperation with the National Association of Social Workers. Letters have already been sent the chairmen of the various sections urging them to make recommendations for their sectional program at an early date. It has been suggested that each section have one section meeting this year instead of two as at Atlantic City. This suggestion is rather generally favored.

Suggestions for Papers and Discussions

In accordance with the constitution, the president and executive secretary will give considerable attention to the program of papers and discussions. Suggestions are very much desired. Requests have already been made that there be at least one and perhaps two meetings of hospital superintendents especially arranged for the consideration of the every-day hospital problems. One such meeting was informally arranged at Atlantic City, but

requests have been made that such meetings be an established feature of the program.

One of the features of the Cincinnati convention will be a visit to the Cincinnati General Hospital and the University of Cincinnati Medical School. Arrangements are being made for both general and section meetings in the various halls and class rooms of the medical school on this date. Business and pleasure can be combined, and the day should be one of the events of the convention.

Commercial Exhibit

Plans for the commercial exhibit are going forward rapidly. Preliminary data, including sketches of commercial exhibit space to be sold by the American Hospital Association and the American Dietetic Association, have already been sent former exhibitors. Replies to this communication indicate considerable interest on the part of hospital suppliers. Similar communications are being sent an additional list of such firms.

The George A. Fern Company of Cincinnati will again have charge of the erection of the exhibit booths. It is expected that these plans will be complete and literature will be printed so that exhibit space can be on sale shortly after the first of March.

Non-commercial Exhibit

Desirable space has been set aside for the non-commercial exhibit purposes. One of the members of the Cincinnati local committee will probably have charge of the non-commercial exhibit. Cincinnati hospitals are famous for non-commercial exhibits, and the exhibit this year should prove attractive. Communications on this subject will be sent out at an early date and further information printed in the next bulletin.

Exhibit of Hospital Plans and Models

Because of renewed interest in hospital construction, it has been suggested that the association arrange with hospital architects and others for an exhibit of hospital plans, sketches, pictures, and models. The suggestion has met with favorable comment. A similar exhibit conducted by THE MODERN HOSPITAL at the Cleveland convention aroused considerable interest. Plans and models of wartime hospitals may perhaps be an added feature. Suggestions relative to this proposed exhibit are desired.

Printing of the 1918 Proceedings

The proceedings of the twentieth annual convention, Atlantic City, 1918, will be printed by THE MODERN HOSPITAL. The association is taking advantage of the large amount of standing type containing the various papers and discussions already printed in THE MODERN HOSPITAL. The discussions have been edited with the view of eliminating unnecessary and irrelevant material. Those who took part in discussion will be given an opportunity to correct their remarks as taken down by the stenographic reporter. These remarks have already been forwarded to the participants in the discussion. Every effort will be made to complete the printing and distribution of the proceedings at an early date.

Legislation

There is now pending before the United States Senate in the Committee on Public Health and National Quarantine, Mr. Ransdell, chairman, Senate Bill No. 5202: to authorize the Secretary of the Treasury to provide hospital and sanitarium facilities for discharged sick and disabled soldiers and sailors.

It is understood the primary purpose of the bill is to provide for the care and treatment of claimants of the

War Insurance Bureau, some of whom are suffering from disabilities of chronic character after having received the so-called maximum treatment at the hands of the military authorities. While the bill has already passed the House, there has been some suggestion that an expenditure of \$10,500,000 by the Federal Government for such a purpose is not necessary at this time. It has been suggested that a wider use might be made of civilian hospitals for the purpose.

For the American Hospital Association the matter has been referred to the War Service Committee, Dr. S. S. Goldwater, chairman, which committee is now giving the matter careful consideration with a view of expressing the opinion and attitude of the association toward the bill.

The secretary has received a communication from one of the members of the association containing the following:

"I am taking this opportunity to write you with reference to the present bills before Congress continuing for two or more years the restrictions against immigration into this country, and would like to know what position the American Hospital Association, through its managers, have taken in the matter. Some of us in the east, connected with the hospitals here, are viewing with considerable alarm the possibility of immigration from the southern countries of Europe during the present year, and several endorsements in favor of continuing restrictions on immigration have gone forward to Washington. A close study of the results of the recent influenza epidemic as shown by the large mortality rate, the reduced efficiency in our great industrial plants, by reason of absence from our mills and factories because of this disease, and the possibility of an early return of this epidemic, makes it evident that every precaution should be taken to safeguard the public health. But the matter of opening up our country to the flood of undesirable and disease-breeding immigrants from certain countries which, as a result of the privation and suffering of the recent war, are sure to constitute a great menace to the public health, and to our industries, and the larger question of imposing on our various states a much larger body of dependents at the public expense warrants action being taken at once by our boards of health, chambers of commerce, and state authorities to prevent such a calamity.

"It would seem to me, that this is a very important matter, to be taken up seriously by your association, if it has not already done so."

The secretary has sent for copies of this bill for consideration of the legislative committee or the board of trustees. In the meantime, opinions on the immigration question as referred to in the above communication are solicited.

The secretary takes this occasion to say that the office is in reasonably close touch with Federal public health legislation both through the *Congressional Record*, which is received regularly in the office of the association, and also through members of both the House of Representatives and the Senate.

Telephone Service and Rates Under Government Control

The January bulletin contained a request for information from various hospitals relative to their telephone service and rates under government control. No replies have been received. Accordingly the following communication has been forwarded to several hospitals in each one of the states:

What about your telephone service, rates, charges and discounts under governmental control? Are you satisfied with the service? Is it better or worse than under private control? Have your telephone rates and charges increased or decreased? Do you receive or have you been deprived of discounts on installation of service under governmental control? Has there been any attempt at standardization of charges to hospitals as charitable institutions under government control in your state?

The secretary desires immediate information from hospitals on this subject. This communication is, therefore, being sent to several hospitals in each of the states. Accurate information is desired promptly because Mr. W. H. Lamar, solicitor in the post office department, stated in a letter, under date of November 9, that "the postmaster-general has appointed a committee to investigate and report upon the matter of standardization of telephone rates throughout the United States." When the report of that committee is received, it may be that the matter of discounts to hospitals may be taken up.

WILL YOU, THEREFORE, PLEASE SEND ME THE INFORMATION REQUESTED ABOVE AT THE EARLIEST POSSIBLE MOMENT?

Standardization of telephone charges to hospitals, including special discounts for cost of telephone service, should be possible under Federal control. This information is desired as the basis for a communication to the postmaster-general in behalf of the American Hospital Association.

In addition, the secretary will be glad to have information on this subject from any other hospitals.

Health Insurance

The health insurance movement has developed very rapidly in the United States. As early as 1912 several associations began to study the subject. In 1916 health insurance measures were introduced in the legislatures of New York, Massachusetts, and New Jersey. In 1917 twelve state legislatures gave consideration to the subject, with the result that eight states appointed investigating commissions. The California, New Jersey, and Massachusetts commissions made reports last year in favor of health insurance legislation, but no such legislation was enacted. Other commissions are reporting this year. Preliminary reports by the Ohio, California, and Wisconsin commissions are now available.

OHIO

Preliminary statement by the Ohio Commission was published in the February number. Summary of the findings and recommendations and opinions is now available in pamphlet form. This and the complete report, with the legislation recommended, can be obtained by addressing the Ohio Health and Old Age Insurance Commission, Columbus, Ohio.

While the commission recommended a plan for compulsory sickness insurance, it is not expected that the legislature will act favorably upon it this year. Other recommendations of the commission, such as re-organization of county health administrative systems, medical inspection in the public schools, and large appropriations for sickness prevention, will undoubtedly receive more favorable consideration.

CALIFORNIA

The report of the California Commission will not contain legislative recommendations. It will contain various sickness prevention recommendations, a draft of compulsory health insurance bill, and a digest of the Lloyd George people's insurance act, upon which the bill is largely based.

The California legislature can not enact compulsory sickness insurance legislation unless the people of the state first amend the constitution. Such an amendment was placed before the voters in November, 1918, but was rejected by a vote of almost three to one. The commission, however, is still continuing this work and will make reports. The following quotation from the 1918 report of the commission shows a situation not uncommon in many of the states, which is of great importance to hospitals in general:

"The comparatively small number of hospital beds that are really available to the wage earners under present conditions points to the imperative need from the public health standpoint of bringing more hospital service within the reach of persons of small income. The fact that the cost of hospital care is prohibitive to many persons who have no alternative except a request for charitable service points to the imperative need from the standpoint of social democracy of providing a way by which good hospital care can be paid for by persons of small income."

WISCONSIN

The recommendations of the majority of the Wisconsin Committee on Social Insurance follow.

Since any compulsory health insurance measure which contemplates a contribution to the fund on the part of the state will first require a constitution amendment, the committee in the meantime offers the following suggestions:

1. We urge upon the legislature the necessity for more liberal appropriations for the support of the state board of health and the encouragement of correspondingly liberal appropriations on the part of the local boards of health, including the appointment of a paid county health

officer in every county of the state. We also deem it advisable to direct special attention to the state health laboratories with the hope that they may be made in the course of time centers of preventive medicine and become useful in the possible future development of so-called group medicine.

2. We urgently recommend the universal introduction of physical and medical examinations into all the public schools and other state educational institutions of Wisconsin. We have arrived at the opinion that a reorganized state health service must rest primarily upon adequate methods of child and school hygiene, including the periodical physical and medical examination of all children during the period of school life.

3. As a means of securing more adequate care, especially during prolonged illness, we are of the opinion that the legislature should give encouragement to the establishment of district nursing centers of various types best adapted to local requirements.

4. The reduction of infant mortality should be made a part of the public health program, and we recommend that a bureau of child welfare be established in connection with the present state health organization.

5. The legislature also should give liberal encouragement to the development of financial community support of hospitals and sanatoria, as most urgently called for by local conditions, subject, of course, to wide variation throughout the state. We, however, feel that every county should have not less than one thoroughly equipped modern hospital for general purposes.

6. While our investigations have not disclosed very serious deficiencies in the housing of our wage-earners, we are of the opinion, nevertheless, that the legislature should provide for the adoption of our growing industrial population. The relation of ill-health to unsanitary methods of housing is so clearly established that it requires no arguments to re-emphasize the urgency of this recommendation by an appeal to the facts, which are understood by all who have given the matter serious consideration.

7. We are of the opinion that occupational diseases should be included in the Workmen's Compensation Act and recommend that proper legislation to this end be enacted.

8. Finally, we would recommend that the state insurance department concern itself more actively with the supervision and control of voluntary insurance undertakings having for their object the pecuniary relief or medical attendance, or both, of wage-earners during more or less prolonged periods of illness. It seems to us that a standardized plan of organization and procedure might be worked out under the direction of the Insurance Commissioner and recommended to the wage-earners of the state as well as to the employers of labor for individual or collective adoption.

The Governors' Messages and the Public Health

The legislatures of some forty states are now in session. The governors have delivered their messages to these bodies. Thirty-four of them have been received and examined by the secretary.

The governor's message is of great importance in that it frequently reveals the public state of mind upon questions of the day. The average governor has his ears around seeking to learn what his constituents think and say about public questions. The messages indicate this year that people have been thinking more than usual about public health.

It used to be said that the members of the average board of public health did nothing but sit around and wait for an epidemic to occur. This was an effective way of saying "boards of health are more interested in cure than in prevention." Whether the statement is correct or not, it certainly is true that last year the country was afflicted with a nation-wide epidemic and that many of our boards of health, state and local, were wholly incompetent to deal with the situation. This may have been due either to incompetence and poor organization on the part of the boards or, more likely, in some instances, to a "penny-wise and pound-foolish" policy on the part of

the state legislatures in the matter of appropriation for public health work. Many of the governors in their messages took cognizance of these conditions. They recommend reorganization of the state health departments along more effective lines as well as reorganization of the local health administrative system. Several of them demand that there be full-time county health officers under the supervision of the state authorities. The governors emphasize the importance of a comprehensive state health system prepared to act at all times for all the people.

The great war as well as the influenza epidemic has aroused greater interest of the governors in public health. Many of them dwell upon the physical unfitness of the young men as revealed by medical examinations under the selective service act. As Governor Milliken of Maine says, "The most startling revelation of the war, from the standpoint of public health, was the fact that one-third of the young men called for service under the selective draft were incapacitated by reason of physical defects or under-development which might have been prevented by proper medical supervision and treatment during their school years." Great importance is also laid upon the ravages of venereal disease, and recommendations are made for adequate appropriations for prevention and cure. In addition, the governors recommend medical inspection in the public schools, extension of the Workmen's Compensation Act, complete physical and educational care of returned soldiers and adequate appropriations for existing and new state hospitals and other institutions. Another governor says, "activities must no longer be confined to dealing with epidemics, but must cover the dissemination of information regarding preventable disease, as well as of better general health conditions through better sanitation, better food, and better water."

Several governors recommend the appointment of commissions to study health insurance. The governor of New York recommends the enactment of health and maternity insurance legislation.

A glance through the following specific recommendations will indicate how important it is that the hospitals take an active interest in public health legislation—not an interest that desires a report after the legislature has adjourned, but one that seeks to assist in the framing of wise public health legislation and opposing in an organized capacity all selfish and narrow and unwise legislation of this kind.

Specific Recommendations From the Legislative Messages of the Several Governors

Arizona.—Appointment of a commission to draft a workmen's compensation act. Reorganization of the state health department with full-time state health officer.

Arkansas.—Enactment of workmen's compensation act. Adequate appropriation to the state department of health—hitherto limited personnel and finances.

Connecticut.—Sickness prevention activities on the part of the state, and particularly the development of state child welfare work.

Illinois.—Creation of a laboratory for psychopathic research in the Department of Public Welfare. Enactment and enforcement of state housing law as a means of protecting the public health.

Indiana.—A commission to study sickness and health insurance. Extension of the public health service for the conservation of "the health and physical and moral well being of our people."

Iowa.—Extension of hospital facilities for the care of crippled children. New tenement house laws.

Maine.—Appointment of a commission to study sickness insurance and report to the next legislature. Reorganization of the state health service and the enactment of laws authorizing the combination of towns into districts

for purposes of employing a public health officer, part of whose salary shall be paid by the state.

Michigan.—A full-time health officer in every county working under the supervision of the state board of health. Strengthening of the workmen's compensation act in general, and in particular a substantial extension of the period of medical care. Appropriation of \$100,000 to combat venereal disease.

Missouri.—Revision of the quarantine and regulatory laws. Complete reorganization of the state board of health. Granting of power to this board to have full supervision of the public health and control of communicable and venereal diseases. Enactment of a workmen's compensation law. Laws for the care of defective children and to safeguard the health of children all over the state.

Montana.—Large appropriations to the state board of health for the prevention of disease and the care of the sick. New laws for the care of the feeble-minded.

New Hampshire.—Laws to strengthen the state department of health.

New Mexico.—Creation of child conservation board to look after the prevention of disease in newly born children and to guard child health in general. Creation of new state department of health with full power to protect the health of all the people.

New York.—Laws requiring physical examination of children in any employment. Enactment of health and maternity insurance laws. Additional accommodations in the state hospitals for the insane.

Nevada.—Increased powers of the state board of health, which was altogether unable to meet the emergencies of the influenza epidemic.

North Carolina.—Laws requiring physical examinations of public school children. More effective sanitary laws.

North Dakota.—New state department of health with full-time executive and county health boards to be accountable to the state department. Appointment of full-time, trained county health nurse in each county. Medical inspection of school children. Adequate appropriation for venereal disease bureau, as well as appropriation to combat trachoma.

Ohio.—Reorganization of the county health administrative system. Adequate appropriations for prevention and eradication of venereal disease and for sickness prevention activities in general.

Oklahoma.—Medical inspection in public schools. Appropriations for a special tuberculosis bureau. Larger appropriations for the state health commissioner. Proper reorganization of the state health work to the end "that the lives and health of the people may be protected."

Oregon.—Creation of a state hospital for industrial cripples and adequate appropriation for the hospital care of crippled children.

South Carolina.—Larger appropriations for the extension of hospitals for the insane.

South Dakota.—A county nurse or health instructor in each county. Extension of the benefits of the workmen's compensation law.

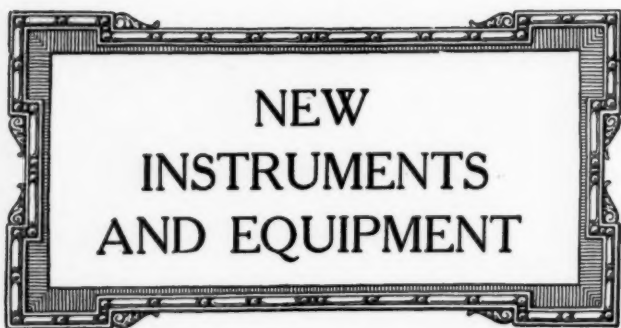
Vermont.—Medical inspection in the public school. Larger appropriation for state institutions and especially for the tuberculous.

Washington.—Larger appropriations for the state board of health and particularly for the prevention and eradication of venereal disease.

West Virginia.—Creation of hospital for the feeble-minded and hospital for the colored insane. Creation of a state health commission for the general supervision of state hospitals. Strengthening of the state health department.

Wyoming.—A full-time state health officer. More authority for the state board of health. Revision of antiquated health laws. The governor says, "We are spending large sums of money to protect our live stock from disease, but I fear we have been overlooking the welfare of our people."

All mankind is divided into three classes: those that are immovable, those that are movable, and those that move.—Arabian proverb.



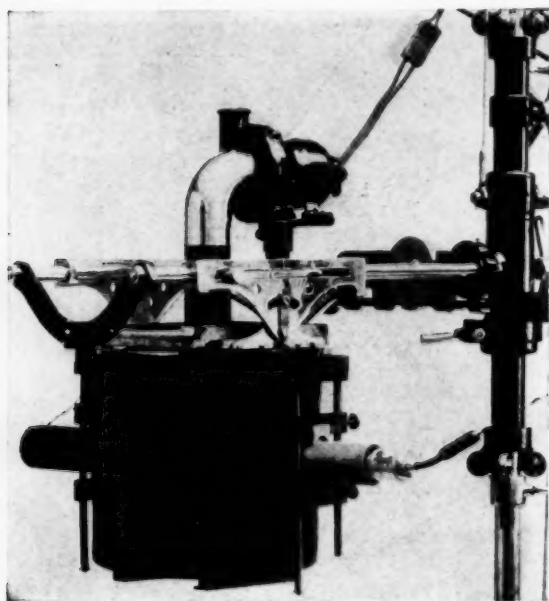
VINCENZ MUELLER, Technical Editor.
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Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

Coolidge Tube Shield and Cooling Unit

The apparatus shown in the accompanying illustrations has been devised for the purpose of protection from the rays, as well as for keeping the x-ray tube from becoming overheated.

The shield is made of exceptionally heavy x-ray proof rubber and is of a size that will fit any lead glass bowl not over 9 inches in diameter. It is so arranged that the end-sleeves and slides will securely support a Coolidge x-ray tube. There is no metal whatsoever in the shield itself, and all metal connections are safely insulated. The protective collars cover both stems of the tube, thus insuring both the operator and the patient against unnecessary exposure to the rays. The shield is so fashioned that it does not interfere in any way with the mechanical action of the tube stand and can be attached to any stereo-



Engeln Coolidge tube shield and cooling unit.

scopic stand without requiring the services of a mechanic.

This unit also includes a powerfully built motor of high speed with an exhaust fan specially constructed for this purpose. This fan runs silently, exhausting the air away from the patient and at the same time keeping the tube cool.

The rubber shield has an aperture 3 inches in diameter and is equipped with a slide filter.

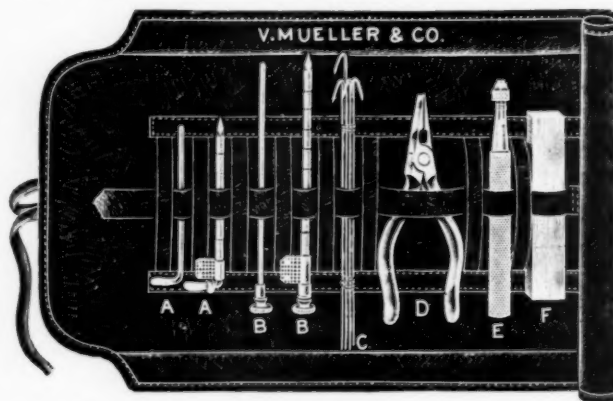
This outfit can be converted into an up-to-date treatment outfit by attaching it to a tube stand and reversing the tube carriage as shown in the illustration.

Foreign Body Localizing Instruments

Among the number of devices adopted by the Medical Department of the United States Army for the localization of foreign bodies in connection with the x-rays, is the apparatus here illustrated, which was originally devised by the late Dr. Walter S. Sutton of Kansas City while in charge of the American Hospital No. 2 at Juilly, France, during the spring and summer of 1915.

The best method of procedure with this set of instruments as now supplied has been described by Capt. E. S. Skinner, Medical Reserve Corps, in the *American Journal of Roentgenology*, as follows:

"After the shadow of the foreign body has been located by means of the axial ray upon a large screen, firmly supported about six inches above the surface of the part examined, the surface is painted with iodine, cocaineized, and a small skin incision made in the center of the shadow. The special canula bearing the blunt or sharp trocar, as circumstances may indicate, and held by a strong clamp at right angles, is then entered through the skin incision. The room is darkened and, under the guidance of the x-ray, the instrument is driven through the tissues. As



Set of Sutton's foreign body localizing instruments.

long as the point is advancing straight toward the anode (and hence toward the foreign body), the shadow of the point will be hidden by the shadow of the upper portion of the instrument.

"When the trocar strikes the foreign body, the patient invariably complains of a sharp pain. Contact is then verified by slight waving movements of the point of the trocar, which can be made to cause the foreign body shadow to describe a circular excursion on the screen.

"The current is now cut off, the screen removed, and the room lighted, while the operator continues to hold the trocar immovable. Next, the trocar is withdrawn from the canula and one of the small hooked piano-wire indicators inserted in its place, while the hook of the latter is held against the foreign body, the canula is withdrawn and the wire snipped off one-quarter inch above the skin. Over this a fairly thick dressing is applied. If other foreign bodies are present, each may be localized in the same way. On the operating table each indicator may be readily followed by the corresponding foreign body. The particular advantages of this method are: (1) operation may almost always be done under local anesthesia, (2) changes in the position of limbs or body do not vitiate the result, (3) there are no calculations to introduce a possible mathematical error, (4) the localization may be carried out aseptically without sterilizing the hands."

The method is pronounced to be very satisfactory by those who have had experience with it, as there are no complicated mathematical problems to be solved and no difficult estimation to be made, inasmuch as the hooked piano-wire always leads to the foreign body.

Simplified Gas and Oxygen Apparatus

In a former issue of THE MODERN HOSPITAL we have described in detail in this department the Connell gas-oxygen apparatus, made for use in our home hospitals.

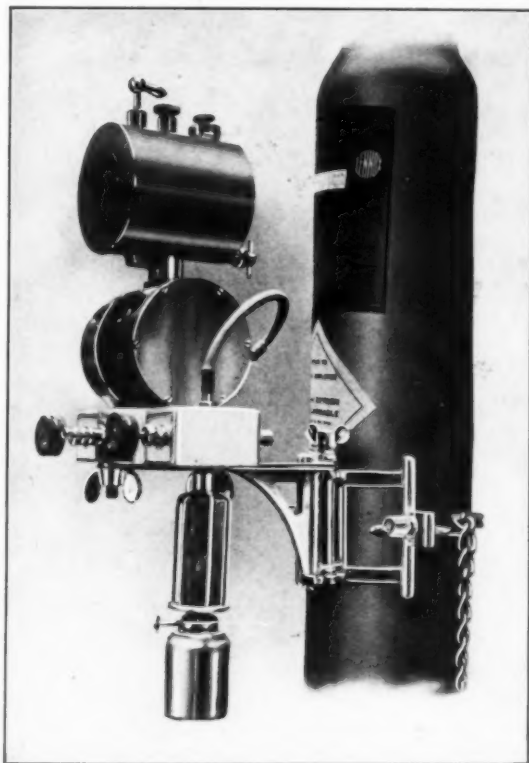


Fig. 1. Oxygen apparatus strapped to large gas tank.

For army use in the base hospitals overseas, it was found that the ordinary type of apparatus with the regular large truck and roller base together with the large cylinders proved rather cumbersome to handle and shift about the

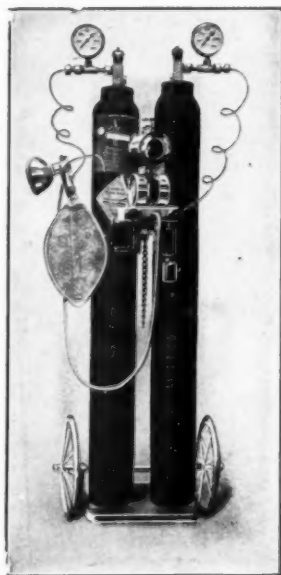


Fig. 2. Complete gas and oxygen apparatus, mounted on small truck.

room. As a rule, two persons are needed to do the shifting, one to handle the truck on which the cylinders are mounted, and the other to handle the machine. Accord-

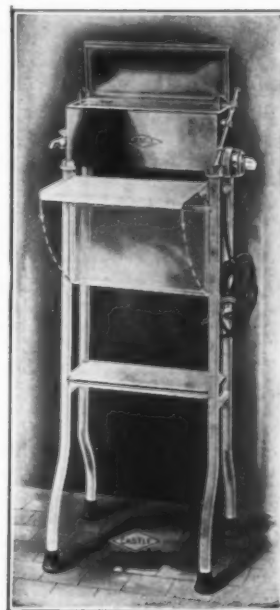
ingly a number of anesthetists at various base hospitals overseas called for a smaller, lighter outfit, so arranged that they still could use the large cylinders. The result of this demand is what the manufacturers call their "Over-seas Model."

Instead of using reducing valves on the cylinders and conducting the gases by means of rubber tubing, high pressure copper tubing does this work, and a small gauge is attached to the tank, showing the pressure of the gases. All the other principles of this model are the same as those embodied in the portable hospital and other special models.

The machine is supported by means of a specially designed universal bracket, which permits the attaching of the apparatus to any size tank and also makes possible the adjustment to any height desired. Figure 1 shows how the apparatus is strapped to the tank, and Fig. 2 the complete outfit mounted on a small truck.

Electric Instrument Sterilizer for Office and Dressing Rooms

The Castle-Rochester electric sterilizer as now offered has several new features which are a great improvement on any other type in use. The cover is opened and the tray with instruments lifted out of the water by simply pushing down a cool lever, either by the use of a hand or with the forearm. The tray stays up, so that the instruments drain and cool before they are taken from the sterilizer. Sharp instruments may be laid in the trays and then slowly immersed in the water without injuring their cutting edges.



Castle-Rochester electric sterilizer on high stand.

Economical operation of the sterilizer is made possible by having three heats. The high heat, which uses the most current, is used only to bring the water quickly to the boiling point. The heat control switch at the end of the sterilizer has an indicating dial which shows whether "high," "medium," or "low" heat is turned on.

The sterilizer will not burn out, nor can the instruments be spoiled by overheating, because of a safety device, which cuts the current off automatically as soon as the water in the sterilizer becomes very low.

The sterilizer is made of heavy copper, coated with tin on the inside. On one end it is supplied with a water

faucet, doing away with the necessity of carrying the sterilizer to the sink, whenever it is emptied.

The outfit is shown here mounted on a metal stand, white enameled and, where a suitable table has not already been provided, this makes a practical and convenient equipment. The shelf is large enough to accommodate a number of instruments before or after they are sterilized, and drops down out of the way when not in use.

New Wristlets for Securing Patients' Arm or Hand on the Operating Table

The wristlets are made of buckskin, lined with chamois. They are fitted with a special lock that permits them to be adjusted instantly and securely locked, and also with a brass nickel-plated adjustable clamp, that permits of their being used on any of the standard types of operating tables by simply clamping them to the table top.



"White Line" universal wristlets.

The use of the wristlets eliminates the time and inconvenience occasioned by having to tie the patient's hands to the table or to his side while administering the anesthetic.

The wristlets are so made that they can be used for holding either the arms or the legs.

Light and Heat Treatment Apparatus

The great varying usefulness of radiant heat has been fully demonstrated in a field ranging from ankylosis, neuritis, and various skin diseases, to the treatment of infantile paralysis in the later stages. The advantages of radiant heat over that of superheated air are admitted to be quite pronounced.

Fundamentally, this apparatus is constructed on the unit principle, and the single unit outfit is intended for the treatment of relatively small surfaces. The double-jaw-leg attachment is a universal hinge and permits the adjusting and locking in any conceivable position to hold the apparatus in the position desired within the possibility of being supported by the legs. The adjustment of these legs can be quickly made, only a turn or two of the set screws being necessary to permit the placing of the legs in the position required in any particular case.

The ratchet hinge on one side of one unit is so arranged that it will fit into the slot on the adjacent side of the second unit; thumb nuts permit of locking units at any desired angle.

Three units give a range in the direction of radiation of 180 degrees to a perfect triangle formation, and, with the complete three-unit apparatus and supporting stand, it is possible to treat any part of the body.

Figure 2 shows the three units applied in hospital treatment for patients confined to bed. A valuable feature of this apparatus is the ease with which the complete apparatus can be transformed into an electric bath cabinet. In this way the patient can be given the bath in the

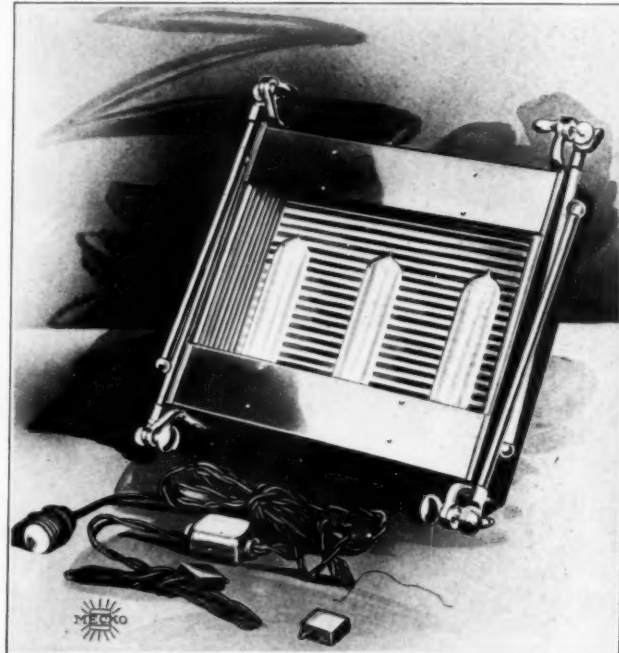


Fig. 1. Mecko light and heat treatment apparatus, folded.

special bath department, where this is available, by the use of the arms and curtain; or, if more convenient, the complete apparatus can be placed alongside the patient's bed, or the patient given the electric bath while in bed.

Especially for smaller institutions not equipped with a department for giving light and heat treatments, this

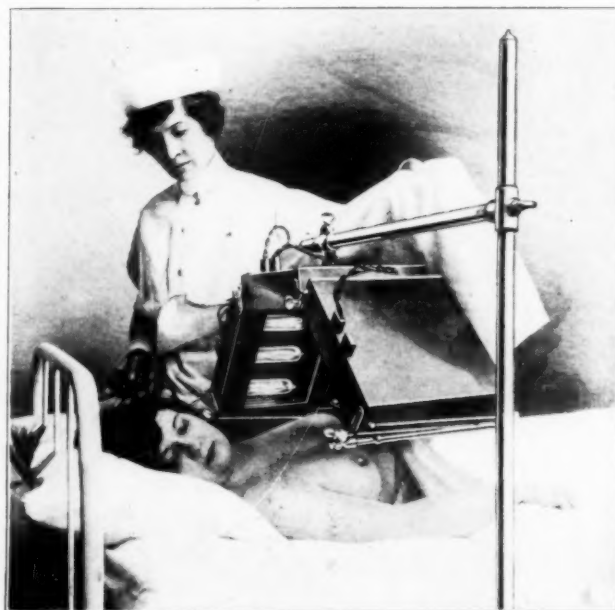


Fig. 2. Mecko light and heat treatment apparatus, in use with patient confined to bed.

interchangeable apparatus should be very useful, as it will enable them to put these treatments at the disposal of their patients at a comparatively low cost.